DOCUMENT RESUME

ED 460 011 SE 065 548

TITLE	Characteristics of Recent Science and Engineering Graduates: 1997. Detailed Statistical Tables.
INSTITUTION	National Science Foundation, Arlington, VA. Div. of Science Resources Studies.
REPORT NO	NSF-01-337
PUB DATE	2001-09-00
NOTE	157p.
AVAILABLE FROM	National Science Foundation, Div. of Science Resources Studies, 4201 Wilson Blvd., Suite 965, Arlington, VA 22230. Tel: 301-947-2722; Fax: 703-292-9092; e-mail: srsweb@nsf.gov. For full text: http://www.nsf.gov/sbe/srs/.
PUB TYPE	Numerical/Quantitative Data (110) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	*College Graduates; *Engineering; *Graduate Surveys; Higher Education; *Sciences

ABSTRACT

This document reports results of a survey conducted to identify the demographic characteristics of men and women who received a bachelors or masters degree from U.S. academic institutions during the 1994-1995 and 1995-1996 academic years. The content of the report is divided into three sections: (1) Technical Notes; (2) Detailed Statistical Tables; and (3) Survey Instrument. (YDS)

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Characteristics of Recent Science and Engineering Graduates: 1997

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Detailed Statistical Tables

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Division of Science Resources Statistics
Directorate for Social, Behavioral, and Economic Sciences

National Science Foundation

September 2001

Characteristics of Recent Science and Engineering Graduates: 1997

Detailed Statistical Tables

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Suggested Citation
National Science Foundation, Division of Science Resources Statistics, *Characteristics of Recent Science and Engineering Graduates: 1997,* NSF 01-337, Project Officer, John Tsapogas (Arlington, VA 2001).

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ACKNOWLEDGMENTS

John Tsapogas of the Division of Science Resources Statistics (SRS) of the National Science Foundation had overall responsibility for conducting the survey and producing this report. Mary Collins of Westat was the study director, and Lucinda Gray of Westat was the associate director.

Linda P. Hardy of SRS and J. Michael Brick of Westat provided valuable statistical advice that greatly enhanced the accuracy of the estimates presented in this report. Comments, reviews, and consultations were provided by Mary Golladay, Program Director of the Human Resources Statistics Program, SRS; Ronald Fecso, Chief Statistician, SRS; and Mary Frase, Deputy Director, SRS. John R. Gawalt, Director, ISG, and SRS' Web team handled electronic publication. Julia Harriston and Tanya Gore provided copyediting, processing, and final composition for this report.

The National Science Foundation (NSF) expresses its appreciation to the recent graduates who contributed their time by responding to this survey. NSF also extends its sincere appreciation to college administrators and other college officials who contributed their time and effort to this survey; their willingness to participate in the survey greatly enhanced the quality of this report.

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General Notes

This report presents data on the characteristics of men and women who received a bachelor's or master's degree in a science or engineering field from U.S. academic institutions during the 1994–95 (1995) and 1995–96 (1996) academic years. The data were collected in 1997 and 1998 and reflect the status of individuals as of April 1997. In addition to the demographic characteristics of recent college graduates with science and engineering (S&E) degrees, the data may be used to understand the employment experiences of recent S&E graduates, such as the extent to which recent graduates entered the labor force, whether they were able to find employment, and the attributes of that employment.

Results of this survey are presented separately for bachelor's and master's degree recipients; complementary tables for the two degree levels are found on facing pages throughout the report, with the exception of a small number of two-page tables.

This report contains three sections. The technical notes in section A contain information on survey methodology, coverage, concepts, definitions, and sampling errors. Detailed tabulations from the survey are presented in section B. Within section B, tables are grouped by topics, such as demographic characteristics, employment characteristics, and so on. Although data were collected using both computer-assisted telephone interviewing (CATI) and mail questionnaires, we have only included a copy of the mail questionnaire in section C.

The Division of Science Resources Statistics also produces reports that present data on degree completions in science and engineering. The data presented in this report measure the number of individuals with recently acquired science and engineering degrees and do not necessarily coincide with the data on degree completions whose source is the Integrated Postsecondary Education Data System (IPEDS). The IPEDS completions data file represents a count of degrees awarded, whereas the NSRCG represents graduates (persons). For additional information on IPEDS, see "Comparison with IPEDS Data" in section A.

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SECTION A.
TECHNICAL NOTES

SECTION A. TECHNICAL NOTES

These technical notes include information on sampling and weighting, survey methodology, sampling and nonsampling errors, and discussions of data comparisons to previous cycles of the National Survey of Recent College Graduates (NSRCG) and the Integrated Postsecondary Education Data System (IPEDS) data. For a more detailed discussion of survey methodology, readers are referred to the NSRCG:97 Methodology Report.

OVERVIEW

The National Survey of Recent College Graduates (NSRCG) is sponsored by the National Science Foundation (NSF), Division of Science Resources Statistics (SRS). The NSRCG is one of three data collections covering personnel and graduates in science and engineering. The other two surveys are the National Survey of College Graduates (NSCG) and the Survey of Doctorate Recipients (SDR). Together, they constitute NSF's Scientists and Engineers Statistical Data System (SESTAT). These surveys serve as the basis for developing estimates and characteristics of the total population of scientists and engineers in the United States.

The first NSF-sponsored NSRCG (then known as New Entrants) was conducted in 1974. Subsequent surveys were conducted in 1976, 1978, 1979, 1980, 1982, 1984, 1986, 1988, 1990, 1993, 1995, and 1997. The initial survey collected data on only bachelor's degree recipients, but all subsequent surveys included both bachelor's and master's degree recipients.

For the NSRCG:97, a sample of 275 colleges and universities was asked to provide lists of eligible bachelor's and master's degree recipients. All sampled institutions provided the lists. From these lists, a sample of 14,057 graduates (9,978 bachelor's and 4,079 master's recipients) was selected. These graduates were interviewed between November 1997 and October 1998. Computer-assisted telephone interviewing (CATI) served as the primary means of data collection. Mail data collection was used only for those who could not be reached by telephone. The unweighted graduate response rate was 82 percent; the weighted response rate was 81 percent.

The NSRCG questionnaire underwent relatively few revisions for the 1997 survey. The limited revisions incorporated new topics such as alternative arrangements with employers. All revisions were done in coordination with similar revisions to the other SESTAT surveys. Topics covered in the survey include:

- Educational experience before and after obtaining the sampled degree;
- Graduate employment characteristics including occupation, salary, unemployment, underemployment, and post-degree work-related training;
- Relationship between education and employment; and
- Graduate background and demographic characteristics.

SAMPLE DESIGN

The NSRCG used a two-stage sample design. In the first stage, a stratified nationally representative sample of 275 institutions was selected with probability proportional to size. There were 102 self-representing institutions, also known as certainty units. For each institution, the measure of size was a composite related to both the number of graduates and the proportion of these who were black or Hispanic. The 173 noncertainty institutions were implicitly stratified by sorting the list by type of control (public, private), region, and the percentage of degrees awarded in science or engineering. Institutions were then selected by systematic sampling from the ordered list.

The second stage of the sampling process involved selecting graduates within the sampled institutions by cohort. Each sampled institution was asked to provide lists of graduates for sampling. Within graduation year (cohort), each eligible graduate was then classified into one of 42 strata based on the graduate's major field of study and degree level. While race was not an explicit stratification variable, black, Hispanic, and American Indian/Alaskan Native graduates were assigned a measure of size equal to three, while non-black/non-Hispanic/non-American Indian/Alaskan Na-

tive graduates were assigned a measure of size equal to one. This method had the same effect as oversampling black, Hispanic, and American Indian/Alaskan Native graduates by a factor of three. Table 1 lists the major fields and the corresponding sampling rates by cohort and degree. These rates are overall sampling rates for the major field, and include the institution's probability of selection and the within-institution sampling rate. To achieve the within-institution sampling rate, the overall rate was divided by the institution's probability of selection. The sampling rates by stratum were applied within each eligible, responding institution, and resulted in sampling 14,057 graduates.This was slightly larger than the target sample size of 13,500, because persons with unknown majors were also included for complete population coverage.

Graduate Eligibility

To be included in the sample, the graduates had to meet all of the following criteria:

- They received a bachelor's or master's degree in an eligible major from the college or university from which they were sampled;
- They received their degree within the two academic years in the study. For the 1997 study, there were two academic years (July 1994 through June 1995, and July 1995 through June 1996);
- They were under the age of 76 and living during the week of April 15, 1997 (the reference week); and
- They lived in the United States during the reference week.

Data Collection and Response

Prior to graduate data collection, it was first necessary to obtain the cooperation of the sampled institutions that provided lists of graduates. All eligible sampled institutions provided graduate lists for the NSRCG:97; one sampled institution was ineligible because no S&E degrees were awarded during the two cohort years for the 1997 survey.

Graduate data collection took place between November 1997 and October 1998, with computer-assisted telephone interviewing as the primary means of data collection. Flyers were sent to all graduates announc-

Table 1. Major filelds and corresponding sampling rates, by cohort and degree: April 1997

Major field	1995 bachelor's rate	1995 master's rate	1996 bachelor's rate	1996 master's rate
Computer sciences	0.016267	0.015048	0.027114	0.026925
Biological sciences	0.012301	0.012591	0.021912	0.023422
Environmental, agricultural & forestry sciences	0.035956	0.036399	0.034512	0.034851
Mathematics/statistics	0.044172	0.041306	0.027265	0.028040
Chemistry	0.009344	0.009152	0.020116	0.020853
Physics/astronomy	0.106371	0.113321	0.063530	0.068295
Other physical sciences, earth sciences, geology, oceanography	0.014561	0.012942	0.020136	0.018837
Psychology	0.012125	0.012544	0.024406	0.026032
Economics	0.027000	0.024967	0.050925	0.048058
Political science	0.016243	0.015223	0.022811	0.023248
Sociology/anthropology	0.042912	0.043212	0.030118	0.027652
Other social sciences	0.011813	0.012465	0.023561	0.025190
Aero/astronautical engineering	0.023609	0.022564	0.020528	0.021180
Chemical engineering	0.008219	0.007464	0.016751	0.015346
Civil engineering	0.006104	0.006012	0.010759	0.010898
Electrical engineering	0.009200	0.010179	0.019109	0.018380
Industrial engineering	0.006278	0.005622	0.018038	0.018058
Mechanical engineering	0.009235	0.008994	0.013754	0.014402
Other engineering	0.009261	0.009729	0.017728	0.017326
Unknown major	0.006104	0.005622	0.010759	0.010898

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

ing the study and asking for the phone numbers at which they could be reached during the survey period. Extensive tracing of graduates was required to obtain the desired response rate. Tracing activities included computerized telephone number searches, national change of address searches (NCOA), school alumni office contacts, school major field department contacts, directory assistance, military locators, post office records, personal referrals from parents or others who knew the graduate, and the use of professional tracing organizations.

Table 2 gives the response rates by cohort, degree, major, type of address, gender, and race/ethnicity. The overall unweighted graduate response rate was 82 percent; the weighted response rate was 81 percent. As can be seen from Table 2, response rates varied somewhat by major field of study and by race/ethnicity. Rates were lowest for those with foreign addresses. It is possible that many unlocated persons with foreign addresses were actually ineligible for the survey due to living outside the United States during the survey reference week. However, a graduate was only classified as ineligible if his/her status was confirmed.

Weight Calculations

To produce national estimates, the data were weighted. The weighting procedures adjusted for unequal selection probabilities, for nonresponse at the graduate level, and for duplication of graduates on the sampling file (graduates in both cohorts). In addition, a ratio adjustment was made at the institution level, using the number of degrees awarded as reported in IPEDS for specified categories of major and degree. The final adjustment to the graduate weights adjusted for responding graduates who could have been sampled twice. For example, a person who obtained an eligible bachelor's degree in 1995 could have obtained an eligible master's degree in 1996 and could have been sampled for either degree. To make the estimates from the survey essentially unbiased, the weights of all responding graduates who could have been sampled twice were divided by 2. The weights of the graduates who were not eligible to be sampled twice were not adjusted.

The weights developed for the NSRCG:97 comprise both full sample weights for use in computing survey estimates and replicate weights for variance estimation using a jackknife replication variance estimation procedure.

Data Editing

Most editing checks were included within the CATI system, including range checks, skip pattern rules, and logical consistency checks. Skip patterns were controlled by the CATI system so that inappropriate items were avoided and appropriate items were not missed. For logical consistency check violations, CATI screens appeared that explained the discrepancy and asked the respondent for corrections. Some additional logical consistency checks were added during data preparation. All of the edit checks discussed above were rerun after item nonresponse imputation.

Imputation of Missing Data

Missing data occurred if the respondent cooperated with the survey but did not answer one or more individual questions. The level of item nonresponse in this study was very low (typically 1 percent or less) due to the use of CATI for data collection and of data retrieval techniques for missing key items. However, imputation for item nonresponse was performed for each survey item to make the study results simpler to present and to allow consistent totals to be obtained when analyzing different questionnaire items. "Not applicable" responses were not imputed since these represented respondents who were not eligible to answer the given item.

Imputation was performed using a hot-deck method. Hot-deck methods estimate the missing value of an item by using values of the same item from other record(s) in the same file. Using the hot-deck procedure, each missing questionnaire item was imputed separately. First, respondent records were sorted by items thought to be related to the missing item. Next, a value was imputed for each item nonresponse recipient from a respondent donor within the same subgroup. The results of the imputation procedure were reviewed to ensure that the plan had been followed correctly. In addition, all edit checks were run on the imputed file to be sure that no data inconsistencies were created in the imputation process.

Accuracy of Estimates

The survey estimates provided in these tables are subject to two sources of error: sampling and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population and

Table 2. Number of graduates, unweighted graduate response rates, and weighted graduate response rates, by graduate characteristic: April 1997

Graduate characteristic	Total	Response		Non-response	Graduate response rate[2]	Graduate response rate[2]
		Complete	Ineligible[1]			
Total	14,057	10,452	1,032	2,573	81.70%	81.20%
Graduation cohort[3]						
1994-95	7,056	5,147	559	1,350	80.90%	80.30%
1995-96	7,001	5,305	473	1,223	82.50%	82.10%
Sampled degree3						
Bachelor's	9,978	7,594	601	1,783	82.10%	81.30%
Master's	4,079	2,858	431	790	80.60%	80.50%
Sampled degree major[3]						
Computer sciences	974	672	80	222	77.20%	77.80%
Biological sciences	1,398	1,103	98	197	85.90%	86.30%
Environmental/agricultural science	501	393	28	80	84.00%	83.50%
Mathematics/statistics	602	471	40	91	84.90%	85.60%
Chemistry	506	406	20	80	84.20%	86.00%
Physics/astronomy	467	373	25	69	85.20%	85.70%
Other physical sciences, earth sciences	480	412	21	47	90.20%	90.20%
Psychology	1,554	1,160	64	330	78.80%	78.80%
Economics	558	367	54	137	75.40%	77.40%
Political science	1,142	817	98	227	80.10%	80.80%
Sociology/anthropology	644	479	41	124	80.70%	80.50%
Other social sciences	689	479	57	153	77.80%	79.10%
Aero/astronautical engineering	488	388	20	80	83.60%	83.40%
Chemical engineering	494	386	42	66	86.60%	85.40%
Civil engineering	564	430	30	104	81.60%	82.20%
Electrical engineering	966	723	45	198	79.50%	79.20%
Industrial engineering	488	351	41	96	80.30%	78.40%
Mechanical engineering	592	479	18	95	84.00%	84.30%
Other engineering	702	482	114	106	84.90%	85.10%
Not reported	248	81	96	71	71.40%	69.50%
Type of address provided by school at Time of sampling[4]						
U.S. address only	12,675	9,705	800	2,170	82.90%	82.10%
Foreign address	595	247	157	191	67.90%	69.00%
No address	787	500	75	212	73.10%	73.60%
Gender of graduate[5]						
Male	8,304	6,178	631	1,495	82.00%	81.40%
Female	5,753	4,274	395	1,084	81.20%	80.90%

See end of table for notes and sources.

Table 2. Number of graduates, unweighted graduate response rates, and weighted graduate response rates, by graduate characteristic: April 1997

Graduate characteristic	Total	Response		Non-response	Graduate response rate[2]	Graduate response rate[2]
		Complete	Ineligible[1]			
Race/ethnicity[3]						
White, non-Hispanic	6,026	4,876	336	814	86.50%	85.10%
Hispanic	1,358	998	92	268	80.30%	78.50%
Black, non-Hispanic	1,572	1,168	82	322	79.50%	78.40%
Asian or Pacific Islander	981	661	92	228	76.80%	78.20%
American Indian/Alaskan Native	246	204	11	31	87.40%	87.00%
Nonresident alien	479	211	87	181	62.20%	61.00%
Not reported	3,395	2,334	332	729	78.50%	76.90%

[1]The 1,032 ineligibles include the following: graduates living outside the United States during the week of April 15, 1997 (473); graduates who reported an ineligible major field for their sampled degree (287); those who did not receive a bachelor's or master's degree from the sampled school within the correct time frame (216); deceased (23); duplicates (12); those who did not attend the sampled school (10); those who did not receive a bachelor's or master's degree (9); and other ineligible (2).

[2]The graduate response rate is calculated as (R-I)/ [(R-I) + (N * p)] where R = Response (complete plus ineligible), I = Ineligible, N = Nonresponse, p = Proportion of response found in scope calculated as (R-I)/R. The institution response rate is 100 percent, so the overall response rate is the same as the graduate response rate.

[3]The cohort, degree, major, and race codes are those reported by institutions at the time of sampling and may not match data reported by the respondents on the survey.

[4]This reflects the type of address provided by the institution at the time of sampling. Additional address information may have been provided by the alumni office during data collection. Graduates for whom both U.S. and foreign addresses were provided are included in the foreign address category.

[5]Gender codes were obtained from four sources: those reported by institutions; those reported on the survey; those coded from first or middle name; and imputation. Imputation was done on 143 nonrespondents where gender could not be coded from the name.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates,1997

hence are subject to sampling variability. If the interviews had been conducted with a different sample, the responses would not have been identical; some figures might have been higher, while others might have been lower.

The standard error is the measure of the variability of the estimates due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors can be used as a measure of the precision expected from a particular sample. Tables 3 and 4 contain standard errors for key statistics included in the detailed tables.

If all possible samples were surveyed under similar conditions, intervals within plus or minus 1.96 standard errors of a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is the 95 percent confidence interval. For example, suppose the total number of 1995 and 1996 bachelor's degree recipients majoring in engineering is 115,135 and the estimated standard error is 3,178. The 95 percent confidence interval for the statistic extends from:

confidence interval for the statistic extends from:

115,135 - (3,178 x 1.96) to 115,135 + (3,178 x 1.96) = 108,906 to 121,364

This means that one can be confident that intervals constructed in this way contain the true population parameter for 95 percent of all possible samples.

Estimates of standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves

Table 3. Unweighted number, weighted estimate, and standard errors for 1995 and 1996 science and engineering bachelor's degree recipients, by graduate characteristics: April 1997

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard Error	Weighted percent	Standard error
Total 1995 and 1996 science and engineering bachelor's degree recipients	7,673	708,930	10,679	100	--
Sex					
Male	4,434	366,379	6,336	51.7	0.66
Female	3,239	342,551	7,695	48.3	0.66
Race/ethnicity					
White, non-Hispanic	5,038	540,800	10,265	76.3	0.68
Black, non-Hispanic	982	49,314	2,919	7.0	0.41
Hispanic	921	48,614	2,430	6.9	0.34
Asian/Pacific Islander	638	64,510	2,841	9.1	0.41
American Indian/Alaskan Native	94	5,665	778	0.8	0.11
Type of major field					
Science	5,450	593,794	10,759	83.8	0.48
Engineering	2,223	115,135	3,178	16.2	0.48
Major field of study					
Computer and information Sciences	377	41,024	2,283	5.8	0.31
Life and related sciences	1,235	139,602	3,989	19.6	0.48
Mathematical sciences	322	26,810	1,433	3.8	0.19
Physical and related sciences	925	36,555	1,337	5.2	0.18
Psychology	849	137,983	4,844	19.5	0.55
Social and related sciences	1,742	212,420	4,907	30.0	0.51
Engineering	2,223	115,135	3,178	16.24	0.48
Occupation (those employed)					
Computer and information Sciences	566	49,904	2,279	8.2	0.36
Life and related sciences	194	19,386	1,563	3.2	0.25
Mathematical sciences	59	4,062	576	0.7	0.09
Physical scientists	345	17,234	1,085	2.8	0.17
Psychology	73	11,465	1,415	1.9	0.23
Social and related scientists	89	10,623	1,235	1.8	0.20
Engineers	1,394	74,528	2,737	12.3	0.47
Other occupations	3,921	418,692	8,393	69.1	0.59

KEY: -- = Not applicable

NOTES: Represents graduates from July 1994 through June 1996. Details may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table 4. Unweighted number, weighted estimate, and standard errors for 1995 and 1996 science and engineering master's degree recipients, by graduate characteristics: April 1997

Characteristic	Unweighted number	Weighted estimate			
		Weighted number	Standard error	Weighted percent	Standard error
Total 1995 and 1996 science and engineering master's degree Recipients	2,914	149,526	4,313	100	--
Sex					
Male	1,828	88,971	2,506	59.5	1.24
Female	1,086	60,555	3,018	40.5	1.24
Race/ethnicity					
White, non-Hispanic	1,796	103,204	3,751	60.0	1.03
Black, non-Hispanic	272	7,105	514	4.75	0.32
Hispanic	244	7,123	627	4.76	0.39
Asian/Pacific Islander	576	31,306	1,390	20.9	0.96
American Indian/Alaskan Native	26	788	184	0.5	0.12
Type of major field					
Science	1,841	102,545	4,184	68.6	1.20
Engineering	1,073	46,980	1,593	31.42	1.20
Major field of study					
Computer and information Sciences	318	18,181	1,174	12.2	0.69
Life and related sciences	285	15,348	852	10.3	0.60
Mathematical sciences	161	7,899	694	5.3	0.42
Physical and related sciences	283	9,670	548	6.5	0.38
Psychology	342	26,352	3,044	17.6	1.66
Social and related sciences	452	25,095	1,111	16.8	0.70
Engineering	1,073	46,980	1,593	31.4	1.20
Occupation (those employed)					
Computer and information Sciences	435	23,752	1,269	17.5	0.85
Life and related sciences	123	6,641	563	4.9	0.41
Mathematical sciences	68	3,426	498	2.5	0.36
Physical scientists	182	6,783	519	5.0	0.39
Psychology	127	9,605	1,451	7.1	0.93
Social and related scientists	111	6,138	633	4.5	0.45
Engineers	748	33,486	1,140	24.6	0.97
Other occupations	822	46,003	2,230	33.9	1.06

KEY: -- = Not applicable

NOTES: Represents graduates from July 1994 through June 1996. Details may not add to totals due to rounding.

SOURCE: National Science Foundation/Division of Sciences Resources Studies, National Survey of Recent College Graduates, 1997

constructing a number of subsamples (replicates) from the full sample and computing the statistics of interest for each replicate. The mean square error of the replicate estimates around their corresponding full sample estimate provides an estimate of the sampling variance of the statistic of interest. To construct the replicates, 86 stratified subsamples of the full sample were created. Eighty-six jackknife replicates were then formed by deleting one subsample at a time from the full sample. WesVar, a computer program developed at Westat, was used to calculate direct estimates of standard errors for a number of statistics from the survey.

Generalized Variance Functions

Computing and printing standard errors for each estimate from the survey is a time-consuming and costly effort. For this survey, a different approach was taken for estimating the standard errors of the estimates included in this report. First, the standard errors for a large number of different estimates were directly computed using the jackknife replication procedures described above. Next, models were fitted to the estimates and standard errors and the parameters of these models were estimated from the direct estimates. These models and their estimated parameters were used to approximate the standard error of an estimate from the survey. This process is called the development of generalized variance functions. Models were fitted for the two types of estimates of primary interest: estimated totals and estimated percentages. It should be noted that the models used to estimate the generalized variance functions may not be completely appropriate for all estimates.

Sampling Errors for Totals

For estimated totals, the generalized variance function applied assumes that the relative variance of the estimate (the square of the standard error divided by the square of the estimate) is a linear function of the inverse of the estimate. Using this model, the standard error of an estimate can be computed as:

$$se(y) = \sqrt{ay^2 + by} \qquad (1)$$

where $se(y)$ is the standard error of the estimate y, and a and b are estimated parameters of the model. The parameters of the models were computed separately for 1995 bachelor's and master's recipients and for 1996 bachelor's and master's recipients, as well as for other important domains of interest. The estimates of the parameters are given in Table 5.

The following steps should be followed to approximate the standard error of an estimated total:

1) obtain the estimated total from the survey,

2) determine the most appropriate domain for the estimate from Table 5,

3) refer to Table 5 to get the estimates of a and b for this domain, and

4) compute the generalized variance using equation (1) above.

For example, suppose that the number of 1995 bachelor's degree recipients in engineering who were currently working in an engineering-related job was 39,400 (y = 39,400). The most appropriate domain from Table 5 is engineering majors with bachelor's degrees from 1995 and the parameters are a = 0.001377 and b = 71.464. Approximate the standard error using equation (1) as:

$$se(39{,}400) = \sqrt{.001377(39{,}400)^2 + 71.464(39{,}400)} = 2{,}226.$$

Sampling Errors for Percentages

The model used to approximate the standard errors for estimates of percentages was somewhat less complex. The generalized variance for estimated percentages assumed that the ratio of the variance of an estimate to the variance of the same estimate from a simple random sample of the same size was a constant. This ratio is called the design effect and is often labeled the DEFF. Since the variance for an estimated percentage, p, from a simple random sample is $p(100\text{-}p)$ divided by the sample size, the standard error of an estimated percentage can be written as:

$$se(p) = \sqrt{DEFF(p)(100 - p)/n} \qquad (2)$$

Table 5. Estimated parameters for computing generalized variances for estimates from the 1997 NSRCG

Domain	Bachelor's recipients parameter estimates			Master's recipients parameter estimates		
	a	b	DEFF	a	b	DEFF
1995 graduates						
All graduates	0.000073	132.546	1.6	0.000323	76.41	1.4
Sex						
Male	0.000073	129.242	1.6	-0.000007	67.101	1.4
Female	0.000463	146.776	1.5	0.002307	61.534	1.2
Major						
Science majors	0.000273	140.369	1.5	0.001121	76.497	1.4
Engineering majors	0.001377	71.464	1.7	-0.000205	57.181	1.2
Occupation						
Scientists	0.000548	119.521	1.6	0.001300	56.181	1.2
Engineers	0.001161	79.275	1.5	-0.000773	59.125	1.2
Other occupations	0.000222	133.195	1.5	0.001239	67.953	1.2
Race/ethnicity						
White, non-Hispanic	0.000167	144.508	1.4	0.001086	64.441	1.3
Black, non-Hispanic	0.007062	63.168	1.5	-0.003100	41.127	1.3
Hispanic	0.002413	66.442	1.6	0.003209	36.210	1.3
Asian/Pacific Islander	0.002315	127.900	1.3	0.000332	61.901	1.2
American Indian/Alaskan Native	0.004560	77.105	1.6	*	*	1.1
1996 graduates						
All graduates	0.000277	142.671	1.7	0.000474	75.413	1.6
Sex						
Male	0.000336	116.715	1.6	0.000238	61.922	1.4
Female	0.000340	175.795	1.5	0.001432	78.436	1.4
Major						
Science majors	0.000640	147.156	1.5	0.001992	65.608	1.5
Engineering majors	0.001446	68.115	1.4	0.000421	47.444	1.2
Occupation						
Scientists	-0.000038	122.765	1.4	0.001515	65.234	1.3
Engineers	0.001189	78.696	1.4	0.000181	47.614	1.2
Other occupations	0.000462	168.633	1.5	0.003501	57.424	1.4
Race/ethnicity						
White, non-Hispanic	0.000398	169.388	1.6	0.000629	71.656	1.4
Black, non-Hispanic	0.007336	62.826	1.7	0.000826	48.648	1.7
Hispanic	0.001271	96.859	1.7	0.001409	39.791	1.5
Asian/Pacific Islander	-0.000210	136.221	1.3	0.002409	52.955	1.2
American Indian/Alaskan Native	0.008356	117.414	1.7	0.096373	16.184	1.2

KEY: 1997 NSRCG=The 1997 National Survey of Recent College Graduates

DEFF = Design effect.

* = Estimates not reported because the specified model resulted in R-square values too small to report.

SOURCE: National Science Foundation, National Survey of Recent College Graduates, 1997

where n is the sample size or denominator of the estimated percentage. DEFFs were computed separately for 1995 bachelor's and master's recipients and for 1996 bachelor's and master's recipients, as well as for other important domains of interest. The median or average values of the DEFFs from these computations are given in Table 5.

The following steps should be followed to approximate the standard error of an estimated percentage:

1) obtain the estimated percentage and sample size from the survey,

2) determine the most appropriate domain for the estimate from Table 5,

3) refer to Table 5 to get the estimates of the DEFF for this domain, and

4) compute the generalized variance using equation (2) above.

For example, suppose that the percentage of 1995 bachelor's degree recipients in engineering who were currently working in an S&E job was 67 percent (p = 67) and the number of engineering majors from the survey (sample size, n) was 1,100. The most appropriate domain from Table 5 is engineering majors with bachelor's degrees from 1995 and the DEFF for this domain is 1.7. Approximate the standard error using equation (2) as:

$$se(67\%) = \sqrt{1.7(67)(100-67)/1100} = 1.85\%$$

Nonsampling Errors

In addition to sampling errors, the survey estimates are subject to nonsampling errors that can arise because of nonobservation (nonresponse or noncoverage), reporting errors, and errors made in the collection and processing of the data. These errors can sometimes bias the data. The NSRCG:97 included procedures specifically design to minimize nonsampling error. In addition, some special studies conducted during the previous cycles of the NSRCG provided some measures of nonsampling errors that are useful in understanding the data from the current survey as well.

Procedures to minimize nonsampling errors were followed throughout the survey. Extensive questionnaire design work was done by Mathematica Policy Research (MPR), NSF, and Westat. This work included focus groups, expert panel reviews, and mail and CATI pretests. This design work was done in conjunction with the other two SESTAT surveys.

Comprehensive training and monitoring of interviewers and data processing staff helped to ensure the consistency and accuracy of the data file. Data collection was done almost entirely by telephone to help reduce the amount of item nonresponse and item inconsistency. Mail questionnaires were used for cases difficult to complete by telephone. Nonresponse was handled in ways designed to minimize the impact on data quality (through weighting adjustments and imputation). In data preparation, a special effort was made in the area of occupational coding. Respondent-chosen codes were verified by data preparation staff using a variety of information collected on the survey and applying coding rules developed by NSF for the SESTAT system.

While general sampling theory can be used to estimate the sampling variability of a statistic, the measurement of nonsampling error is not easy and usually requires that an experiment be conducted as part of the data collection, or that data external to the study be used. In the NSRCG:95, two quality analysis studies were conducted: (1) an analysis of occupational coding; and (2) a CATI reinterview. As noted above, these special studies can also inform analysts about the 1997 survey data.

The occupational coding report included an analysis of the CATI autocoding of occupation and the best coding operation. During CATI interviewing, each respondent's verbatim occupation description was autocoded by computer into a standard SESTAT code whenever possible. Autocoding included both coding directly to a final category and coding to an intermediate code-selection screen. If the description could not be autocoded, the respondent was asked to select the appropriate occupation category during the interview. For the primary occupation, 22 percent of the responses were autocoded to a final category and 19 percent were autocoded to an intermediate screen. The results of the occupation autocoding were examined, and the process was found to be successful and efficient.

For the best coding operation, an occupational worksheet for each respondent was generated and reviewed by an experienced occupational coder. This review was based on the work-related information provided by the graduate. If the respondent's self-selected occupation code was inappropriate, a new or "best" code was assigned. A total of 17,894 responses were received to the three occupation questions in the 1995 survey cycle. Of these, 25 percent received updated codes during the best coding process, with 16 percent being recoded from the "other" category and 9 percent recoded from the "non-other" categories. This analysis indicated that the best coding activity was necessary to ensure that the most appropriate occupation codes were included on the final data file. As a result of this NSRCG:95 quality study, the best coding procedure was implemented in the 1997 survey as well.

The second quality analysis study conducted in the NSRCG:95 involved a reinterview of a sample of 800 respondents. For this study, sampled respondents were interviewed a second time, and responses to the two interviews were compared. This analysis found that the questionnaire items in which respondents were asked to provide reasons for certain events or behaviors had relatively large index of inconsistency values. Examples include reasons for not working during the reference week and reasons for working part-time. High response variability is typical for items that ask about reasons and beliefs rather than behaviors, and the results were not unusual for these types of items. Some of the other differences between the two interviews were attributed to the time lag between the original interview and reinterview. Overall, the results of the reinterview study did not point to any significant problems with the questionnaire.

For the NSRCG:93, two data quality studies were completed: (1) an analysis of interviewer variance, and (2) a behavioral coding analysis of 100 recorded interviews. The interviewer variance study was designed to measure the impact of interviewer effects on the precision of the estimates. The results showed that interviewer effects for most items were minimal and thus had a very limited effect on the standard error of the estimates. Interviewer variance was highest for open-ended questions.

The behavioral coding study was done to observe the extent to which interviewers were following the structured interview and the extent to which it became necessary for them to give unstructured additional explanation or comments to respondents. As part of the study, 100 interviews were taped and then coded on a variety of behavioral dimensions. This analysis revealed that, on the whole, the interview proceeded in a very structured manner, with 85 percent of all question and answer "dyads" being "asked and answered only." Additional unstructured interaction/discussion took place most frequently for those questions in which there was some ambiguity in the topic. In most cases this interaction was judged to have facilitated obtaining the correct response.

For both survey cycles, results from the quality studies were used to identify those questionnaire items that might need additional revision for the next study cycle. Debriefing sessions concerning the survey were held with interviewers, and this information was also used in revising the survey for the next cycle.

Comparisons of Data With Previous Years' Results

A word of caution needs to be given concerning comparisons with previous NSRCG results. During the 1993 cycle, the SESTAT system underwent considerable revision in several areas, including survey eligibility, data collection procedures, questionnaire content and wording, and data coding and editing procedures. The changes made for the 1995 cycle were less significant, but may affect data trend analysis. For a detailed discussion of these changes, please see the 1993 and 1995 NSRCG methodology reports.

For the 1997 NSRCG, there were no significant procedural changes that would affect the comparison of results between the 1995 and 1997 survey cycles.

Comparisons With IPEDS Data

The National Center for Education Statistics (NCES) conducts a survey of the nation's postsecondary institutions, called the Integrated Postsecondary Education Data System (IPEDS). The IPEDS Completions Survey reports on the number of degrees awarded by all major fields of study, along with estimates by gender and race/ethnicity.

Although both the NSRCG and IPEDS are surveys of postsecondary education and both report on completions from those institutions, there are important differences in the target populations for the two surveys that directly affect the estimates of the number of graduates. The reason for the different target populations is that the goals of the surveys are not the same. The IPEDS estimates of degrees awarded are intended to measure the output of the educational system. The NSRCG estimates are intended to measure the supply and utilization of a portion of graduates in the years following their completion of a degree. These goals result in definitions of the target population that are not completely consistent for the two surveys. Other differences between the estimates can be explained to a very large extent by a few important aspects of the design or reporting procedures in the two surveys. The main differences between the two studies that affect comparisons of estimates overall and by race/ethnicity are listed below.

- The IPEDS Completions data file represents a count of degrees awarded, whereas the NSRCG represents graduates (persons). If a person receives more than one degree, institutions are instructed to report each degree separately in IPEDS. In the NSRCG, each person is counted only once.

- The NSRCG includes only people who were residing in the United States during the reference week for the survey (the week of April 15 of the survey year). People who received degrees during the years covered by the survey, but resided outside the United States during the reference week, appear in IPEDS counts, but not in NSRCG counts.

- The NSRCG includes only major fields of study that meet the specific SESTAT system definition of science and engineering (S&E), while IPEDS includes all fields. The SESTAT field codes were designed to map directly to the 6-digit Classification of Instructional Program (CIP) codes used in IPEDS. However, published reports from the two studies may group the specific field codes differently for reporting purposes. Therefore, when comparing the NSRCG estimates in this report to IPEDS, care must be taken to select and group the IPEDS estimates according to the NSRCG field definitions shown in the appendix. For example, the NSRCG reporting category of Computer and Information Sciences does not include computer programming or data processing technology, but these fields are included in this category in NCES's *Digest of Education Statistics*. In addition, several NSRCG reporting categories include fields classified as multi/interdisciplinary studies in IPEDS. The NSRCG reporting category of Social and Related Sciences has the most differences in definition from IPEDS. The IPEDS category for Social and Related Sciences also includes History whereas the NSF category excludes History.

- The IPEDS data reflect information submitted by institutions from administrative records, whereas the NSRCG represents reports of individual graduates collected in interviews. Often, estimates differ when the mode of data collection and sources of data are different.

- Whereas the IPEDS is a census of postsecondary institutions, the NSRCG is a sample survey. As a result, NSRCG estimates include the sampling error inherent in all sample surveys.

- There is an additional consideration for estimates by race/ethnicity. Prior to the 1994–95 academic year, IPEDS collected race/ethnicity data only by broad 2-digit CIP code fields, not by the specific 6-digit CIP fields needed to identify the S&E fields as defined on NSRCG. Thus, it is not possible to obtain IPEDS race/ethnicity data that precisely match the S&E population as defined by NSRCG for the academic years included in this report. For example, the 2-digit CIP for Social Sciences and History includes history, which is not an S&E field, but does not include such S&E fields as agricultural economics and public policy analysis which are included in the NSF category for Social and Related Sciences.

Despite these factors, the NSRCG and IPEDS estimates are consistent when appropriate adjustments for these differences are made. For example, the proportional distributions of graduates by field of study are nearly identical, and the numerical estimates are similar. Further information on the comparison of NSRCG and IPEDS estimates is available in the report, *A Com-*

parison of Estimates in the NSRCG and IPEDS, available in the SRS website, at http://www.nsf.gov/sbe/srs/stats.htm.

Other Explanatory Information

The following definitions are provided to facilitate the reader's use of the data in this report.

Coverage of tables: The tables in this report present information for two groups of recent graduates. The first of these groups consists of persons who earned bachelor's degrees in S&E fields from U.S. institutions during academic years 1995 and 1996. The second group includes those who earned S&E master's degrees during the same two years.

Major field of study: Derived from the survey major field category most closely related to the respondent's degree field. Exhibit 1 gives a listing of the detailed major field codes used in the survey. Exhibit 2 gives a listing of the summary major field codes developed by NSF and used in the tables. The appendix lists the eligible and ineligible major fields within each summary category.

Occupation: Derived from the survey job list category most closely related to the respondent's primary job. Exhibit 3 gives a listing of the detailed job codes used in the survey, and Exhibit 4 gives the summary occupation codes developed by NSF and used in the tables.

Labor force: The labor force includes individuals working full or part time as well as those not working but seeking work or on layoff. It is a sum of the employed and the unemployed.

Unemployed: The unemployed are those who were not working on April 15 and were seeking work or on layoff from a job.

Type of employer: This is the sector of employment in which the respondent was working on his or her primary job held on April 15, 1997. In this categorization, those working in 4-year colleges and universities or university-affiliated medical schools or research organizations were classified as employed in the "4-year college and university" sector. Those working in elementary, middle, secondary, or 2-year colleges or other educational institutions were categorized in the group "other educational." The other sectors are private, for-profit; self-employed; nonprofit organizations; federal government; and state or local government. Those reporting that they were self-employed but in an incorporated business were classified in the private, for-profit sector.

Primary work activity: This refers to the activity that occupied the most time on the respondent's job. In reporting the data, those who reported applied research, basic research, development, or design work were grouped together in "research and development (R&D)." Those who reported accounting, finance or contracts, employee relations, quality or productivity management, sales and marketing, or managing and supervising were grouped into "management, sales, administration." Those who reported production, operations, maintenance, professional services or other activities were given the code "other."

Full-time salary: This is the annual income for the full-time employed who were not self-employed (either incorporated or not incorporated), whose principal job was not less than 35 hours per week, and who were not full-time students on the reference date (April 15, 1997). To annualize salary, reported hourly salaries were multiplied by the reported number of hours paid per week, then multiplied by 52; reported weekly salaries were multiplied by 52; reported monthly salaries were multiplied by 12. Yearly and academic yearly salaries were left as reported.

EXHIBIT 1. LIST A: EDUCATION CODES

This EDUCATION CODES list is ordered alphabetically. The titles in bold type are broad fields of study. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your field of study, use the "OTHER" code under the most appropriate broad field in bold print. If none of the codes fit your field of study, use Code 995.

Agriculture Business and Production
601 Agriculture, economics (also see 655 and 923)
602 OTHER agricultural business and production

Agricultural Sciences
605 Animal sciences
606 Food sciences and technology (also see 638)
607 Plant sciences (also see 633)
608 OTHER agricultural sciences

610 **Architecture/Environmental Design**
(for architectural engineering, see 723)

620 **Area/Ethnic Studies**

Biological/Life Sciences
631 Biochemistry and biophysics
632 Biology, general
633 Botany (also see 607)
634 Cell and molecular biology
635 Ecology
636 Genetics, animal and plant
637 Microbiology
638 Nutritional sciences (also see 606)
639 Pharmacology, human and animal (also see 788)
640 Physiology, human and animal
641 Zoology, general
642 OTHER biological sciences

Business Management/Administrative Services
651 Accounting
652 Actuarial science
653 Business administration and management
654 Business, general
655 Business/managerial economics (also see 601 and 923)
656 Business marketing/marketing mgmt.
657 Financial management
658 Marketing research
843 Operations research
659 OTHER business management/admin. services

Communications
661 Communications, general
662 Journalism
663 OTHER communications

Computer and Information Sciences
671 Computer/information sciences, general
672 Computer programming
673 Computer science (also see 727)
674 Computer systems analysis
675 Data processing technology
676 Information services and systems
677 OTHER computer and information sciences

Conservation/Renewable Natural Resources
680 Environmental science studies
681 Forestry sciences
682 OTHER conservation/renewable natural resources

690 **Criminal Justice/Protective Services**
(also see 922)

Education
701 Administration
702 Computer teacher education
703 Counselor education/guidance services
704 Educational psychology
705 Elementary teacher education
706 Mathematics teacher education
707 Physical education/coaching
708 Pre-elementary teacher education
709 Science teacher education
710 Secondary teacher education
711 Special education
712 Social science teacher education
713 OTHER education

Engineering
721 Aerospace, aeronautical, astronautical engineering
722 Agricultural engineering

Engineering (continued)
723 Architectural engineering
724 Bioengineering and biomedical engineering
725 Chemical engineering
726 Civil engineering
727 Computer/systems engineering (also see 673)
728 Electrical, electronics, communications engineering (also see 751)
729 Engineering sciences, mechanics, physics
730 Environmental engineering
731 General engineering
732 Geophysical engineering
733 Industrial engineering (also see 752)
734 Materials engineering, including ceramics and textiles
735 Mechanical engineering (also see 753)
736 Metallurgical engineering
737 Mining and minerals engineering
738 Naval architecture and marine engineering
739 Nuclear engineering
740 Petroleum engineering
741 OTHER engineering

Engineering-Related Technologies
751 Electrical and electronic technologies
752 Industrial production technologies
753 Mechanical engineering-related technologies
754 OTHER engineering-related technologies

Languages, Linguistics, Literature/Letters
760 English Language and Literature/Letters
771 Linguistics
772 OTHER foreign languages and literature

Health Professions and Related Sciences
781 Audiology and speech pathology
782 Health services administration
783 Health/medical assistants
784 Health/medical technologies
785 Medical preparatory programs (e.g., pre-dentistry, pre-medical, pre-veterinary)
786 Medicine (e.g., dentistry, optometry, osteopathic, podiatry, veterinary)
787 Nursing (4 years or longer program)
788 Pharmacy (also see 639)
789 Physical therapy and other rehabilitation/ therapeutic services

Health Professions and Related Sciences
790 Public health (including environmental health and epidemiology)
791 OTHER health/medical sciences

800 **Home Economics**

810 **Law/Prelaw/Legal Studies**

820 **Liberal Arts/General Studies**

830 **Library Science**

Mathematics
841 Applied (also see 843, 652)
842 Mathematics, general
843 Operations research
844 Statistics
845 OTHER mathematics

850 **Parks, Recreation, Leisure, and Fitness Studies**

Philosophy, Religion, and Theology
861 Philosophy of science
862 OTHER philosophy, religion, theology

Physical Sciences
871 Astronomy and astrophysics
872 Atmospheric sciences and meteorology
631 Biochemistry and biophysics
873 Chemistry
874 Earth sciences
680 Environmental science studies
875 Geology
876 Geological sciences, other
877 Oceanography
878 Physics
879 OTHER physical sciences

Psychology
891 Clinical
892 Counseling
704 Educational
893 Experimental
894 General
895 Industrial/Organizational

Psychology (continued)
896 Social
897 OTHER psychology

Public Affairs
901 Public administration
902 Public policy studies
903 OTHER public affairs

910 **Social Work**

Social Sciences and History
921 Anthropology and archeology
922 Criminology (also see 690)
923 Economics (also see 601 and 655)
924 Geography
925 History of science
926 History, other
927 International relations
928 Political science and government
929 Sociology
930 OTHER social sciences

Visual and Performing Arts
941 Dramatic arts
942 Fine arts, all fields
943 Music, all fields
944 OTHER visual and performing arts

EXHIBIT 2. MAJOR CODE CATEGORIES FOR TABULATIONS

1. **Computer and information sciences**
   Computer science and information sciences 671, 673, 674, 676, 677

2. **Life and related sciences**
   Agricultural and food sciences 605-608
   Biological sciences 631-642, 991, (781-791 Ph.D. degree only)
   Environmental life sciences, including forestry sciences 680, 681

3. **Mathematical sciences**
   Mathematics and related sciences 841-845

4. **Physical and related sciences**
   Chemistry, except biochemistry 873
   Earth sciences, geology, and oceanography 872, 874-877
   Physics and astronomy 871, 878
   Other physical sciences 879

5. **Psychology**
   Psychology 891-897, 704

6. **Social and related sciences**
   Economics 601, 923
   Political science and related sciences 902, 927, 928
   Sociology and anthropology 921, 922, 929
   Other social sciences 771, 861, 924, 925, 930, 620

7. **Engineering**
   Aerospace and related engineering 721
   Chemical engineering 725
   Civil and architectural engineering 726, 723
   Electrical, electronic, computer, and communications engineering 727, 728
   Industrial engineering 733
   Mechanical engineering 735
   Other engineering 722, 724, 729-732, 734, 736-741

8. **Other majors**
   602, 610, 651-659, 661-663, 672, 675, 682, 690, 701-703, 705-713, 751-754, 760, 772, 781-791*, 800, 810, 820, 830, 850, 862, 901, 903, 910, 926, 941-944, 995

*At the BA, MA, or professional level.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

EXHIBIT 3. LIST B: JOB CODES

This JOB CODES list is ordered alphabetically. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists
021 Agricultural and food scientists
022 Biochemists and biophysicists
023 Biological scientists (e.g., botanists, ecologists, zoologists)
024 Forestry, conservation scientists
025 Medical scientists (excluding practitioners)
026 Technologists & technicians in the biological/life sciences
027 OTHER biological/life scientists

Clerical/Administrative Support
031 Accounting clerks, bookkeepers
032 Secretaries, receptionists, typists
033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy & Other Religious Workers**

Computer Occupations (Also see 173)
*** Computer engineers (See 087, 088 under Engineering)
051 Computer programmers (business, scientific, process control)
052 Computer system analysts
053 Computer scientists, except system analysts
054 Information systems scientists or analysts
055 OTHER computer, information science occupations

*** **Consultants** *(Select the code that comes closest to your usual area of consulting)*

070 **Counselors, Educational & Vocational** (Also see 236)

Engineers, Architects, Surveyors
081 Architects

*** Engineers (Also see 100-103)
082 Aeronautical, aerospace, astronautical
083 Agricultural
084 Bioengineering & biomedical
085 Chemical
086 Civil, including architectural & sanitary
087 Computer engineer - hardware
088 Computer engineer - software
089 Electrical, electronic
090 Environmental
091 Industrial
092 Marine engineer or naval architect
093 Materials or metallurgical
094 Mechanical
095 Mining or geological
096 Nuclear
097 Petroleum
098 Sales
099 Other engineers

*** Engineering Technologists and Technicians
100 Electrical, electronic, industrial, mechanical
101 Drafting occupations, including computer drafting
102 Surveying and mapping
103 OTHER engineering technologists and technicians

104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations
111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
113 Health Technologists & Technicians (e.g., dental hygienists, health record technologist/technicians, licensed practical nurses,

Health Occupations (continued)
medical or laboratory technicians, radiologic tech-nologists/technicians)
114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators
(Also see 151-153)
141 Top and mid-level managers, executives, administrators (people who manage other managers)
*** All other managers, including the self-employed
- Use the code that comes closest to the field you manage

Management-Related Occupations
(Also see 141)
151 Accountants, auditors, and other financial specialists
152 Personnel, training, and labor relations specialists
153 OTHER management related occupations

Mathematical Scientists
171 Actuaries
172 Mathematicians
173 Operations research analysts, modeling
174 Statisticians
175 Technologists and technicians in the mathematical sciences
176 OTHER mathematical scientists

Physical Scientists
191 Astronomers
192 Atmospheric and space scientists
193 Chemists, except biochemists
194 Geologists, including earth scientists
195 Oceanographers
196 Physicists
197 Technologists and technicians in the physical sciences
198 OTHER physical scientists

*** **Research Associates/Assistants**
(Select the code that comes closest to your field)

Sales and Marketing
200 Insurance, securities, real estate & business services
201 Sales Occupations - Commodities Except Retail (e.g., industrial machinery/equipment/ supplies, medical and dental equip/supplies)
202 Sales Occupations - Retail (e.g., furnishings, clothing, motor vehicles, cosmetics)
203 OTHER marketing and sales occupations

Service Occupations, Except Health
(Also see 111-114)
221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
222 Protective services (e.g., fire fighters, police, guards)
223 OTHER service occupations, except health

Social Scientists
231 Anthropologists
232 Economists
233 Historians, science and technology
234 Historians, except science and technology
235 Political scientists
236 Psychologists, including clinical (Also see 070)
237 Sociologists
238 OTHER social scientist

240 **Social Workers**

Teachers/Professors
251 Pre-Kindergarten and kindergarten
252 Elementary
253 Secondary - computer, math, or sciences
254 Secondary - social sciences
255 Secondary - other subjects
256 Special education - primary and secondary
257 OTHER precollegiate area

*** Postsecondary
271 Agriculture
272 Art, Drama, and Music
273 Biological Sciences
274 Business Commerce and Marketing
275 Chemistry
276 Computer Science
277 Earth, Environmental, and Marine Science
278 Economics
279 Education

Teachers/Professors (continued)

*** Postsecondary

280 Engineering
281 English
282 Foreign Language
283 History
284 Home Economics
285 Law
286 Mathematical Sciences
287 Medical Science
288 Physical Education
289 Physics
290 Political Science
291 Psychology
292 Social Work
293 Sociology
294 Theology
295 Trade and Industrial
296 OTHER health specialties
297 OTHER natural sciences
298 OTHER social sciences
299 OTHER Postsecondary

Other Professions

401 Construction trades, miners & well drillers
402 Mechanics and repairers
403 Precision/production occupations
(e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
404 Operators and related occupations
(e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
405 Transportation/material moving occupations

500 **Other Occupations (Not Listed)**
501 Teaching in non-school setting
502 Legal technician

EXHIBIT 4. NSF OCCUPATIONAL CODE CATEGORIES FOR TABULATIONS

1. **Computer and information scientists**
   Computer and information scientists 052-055, 088
   Postsecondary teachers in computer sciences 276

2. **Life and related scientists**
   Agricultural and food scientists 021
   Biological scientists 022, 023, 025, 027
   Environmental life scientists including forestry scientists 024
   Postsecondary teachers in life and related sciences 273, 271, 287, 297

3. **Mathematical scientists**
   Mathematical scientists 172-174, 176
   Postsecondary teachers in mathematical sciences 286

4. **Physical scientists**
   Chemists, except biochemists 193
   Earth scientists, geologists, and oceanographers 192, 194, 195
   Physicists and astronomers 191, 196
   Other physical scientists 198
   Postsecondary teachers in physical and related sciences 289, 277, 275

5. **Psychology**
   Psychologists 236

6. **Social and related scientists**
   Economists 232
   Political scientists 235
   Sociologists and anthropologists 231, 237
   Other social scientists 238, 233
   Postsecondary teachers in social and related sciences 278, 291, 290, 293, 298

7. **Engineers**
   Aerospace and related engineers 082
   Chemical engineers 085
   Civil and architectural engineers 086
   Electrical, electronic, computer, and communications engineers 087, 089
   Industrial engineers 091
   Mechanical engineers 094
   Other engineers 083, 084, 090, 092-093, 095-097, 099, 098
   Postsecondary teachers in engineering 280

8. **All other occupations (occupations other than S&E)**
   Managers and related occupations 141, 151-153
   Health and related occupations, 111-114
   Educators other than science and engineering postsecondary 253-254, 251, 252, 255-257, 272, 274, 279 281-285, 288, 292, 294-296, 299
   Social services and related occupations 240, 070, 040
   Technicians, including computer programmers 026, 175, 197, 100-104, 081, 051
   Sales and marketing occupations 200-203
   Other occupations 010, 031-033, 120, 130, 110, 500 (501-502), 171, 234, 221-223, 401-405

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

APPENDIX
ELIGIBLE AND INELIGIBLE MAJORS: 1997
ELIGIBLE SCIENCE AND ENGINEERING FIELDS OF STUDY

	1997 NSF CODE	1990 CIP[1] CODE
1. Computer, information, and mathematical sciences		
11 COMPUTER & INFO SCIENCES		
COMPUTER & INFO SCIENCES, GENERAL	671	11.0101
COMPUTER SCIENCE	673	11.0701
COMPUTER SYSTEMS ANALYSIS	674	11.0501
INFORMATION SCIENCES & SYSTEMS	676	11.0401
COMPUTER & INFO SCIENCES, OTHER	677	11.9999
12 MATHEMATICAL SCIENCES		
APPLIED MATHEMATICS, GENERAL	841	27.0301
APPLIED MATHEMATICS, OTHER	841	27.0399
MATHEMATICS	842	27.0101
OPERATIONS RESEARCH	843	27.0302
MATHEMATICAL STATISTICS	844	27.0501
MATHEMATICS, OTHER	845	27.9999
MATHEMATICS & COMPUTER SCIENCE	845	30.0801
2. Life and related sciences		
21 AGRICULTURAL & FOOD SCIENCES		
ANIMAL SCIENCES	605	02.0201-02.0299
FOOD SCIENCES & TECHNOLOGY	606	02.0301
PLANT SCIENCES	607	02.0401-02.0499
SOIL SCIENCE	608	02.0501
AGRICULTURAL SCIENCES, OTHER	608	02.9999
AGRICULTURAL SCIENCES, GENERAL	608	02.0101-02.0102
22 BIOLOGICAL SCIENCES		
BIOCHEMISTRY & BIOPHYSICS	631	26.0202-26.0203
BIOLOGY, GENERAL	632	26.0101
BOTANY	633	26.0301-26.0399
CELL & MOLECULAR BIOLOGY	634	26.0401-26.0499
ECOLOGY	635	26.0603
GENETICS, PLANT & ANIMAL	636	26.0613
MICROBIOLOGY/BACTERIOLOGY	637	26.0501
NUTRITIONAL SCIENCES	638	26.0609
PHARMACOLOGY, HUMAN & ANIMAL	639	26.0705
PHYSIOLOGY, HUMAN & ANIMAL	640	26.0706
ZOOLOGY, GENERAL	641	26.0701
ENTOMOLOGY	641	26.0702
PATHOLOGY, HUMAN & ANIMAL	641	26.0704

	1997 NSF CODE	1990 CIP[1] CODE
2. Life and related sciences (continued)		
ZOOLOGY, OTHER	641	26.0799
ANATOMY	642	26.0601
MARINE/AQUATIC BIOLOGY	642	26.0607
NEUROSCIENCE	642	26.0608
PARASITOLOGY	642	26.0610
RADIATION BIOLOGY/RADIOBIOLOGY	642	26.0611
TOXICOLOGY	642	26.0612
BIOMETRICS	642	26.0614
BIOSTATISTICS	642	26.0615
BIOTECHNOLOGY RESEARCH	642	26.0616
EVOLUTIONARY BIOLOGY	642	26.0617
BIOLOGICAL IMMUNOLOGY	642	26.0618
VIROLOGY	642	26.0619
MISC BIOLOGICAL SPEC, OTHER	642	26.0699
BIOLOGICAL SCIENCES, OTHER	642	26.9999
BIOLOGICAL & PHYSICAL SCIENCES	991	30.0101
SYSTEMS SCIENCE & THEORY	991	30.0601
23 ENVIRONMENTAL & FORESTRY SCIENCES		
ENVIRONMENTAL SCIENCE/STUDIES	680	03.0102
FORESTRY SCIENCES	681	03.0502
3. Physical and related sciences		
31 CHEMISTRY		
CHEMISTRY	873	40.0501-40.0599
32 EARTH SCIENCE, GEOLOGY, OCEAN		
ATMOSPHERIC SCIENCE & METEOROLOGY	872	40.0401
EARTH & PLANETARY SCIENCES	874	40.0703
GEOLOGY	875	40.0601
GEOCHEMISTRY	876	40.0602
GEOPHYSICS & SEISMOLOGY	876	40.0603
PALEONTOLOGY	876	40.0604
GEOLOGICAL SCIENCES, OTHER	876	40.0699
OCEANOGRAPHY	877	40.0702
33 PHYSICS & ASTRONOMY		
ASTRONOMY	871	40.0201
ASTROPHYSICS	871	40.0301
PHYSICS	878	40.0801-40.0899
34 OTHER PHYSICAL SCIENCES		
PHYSICAL SCIENCES, GENERAL	879	40.0101
METALLURGY	879	40.0701
MISC PHYSICAL SCIENCES, OTHER	879	40.0799
PHYSICAL SCIENCES, OTHER	879	40.9999

	1997 NSF CODE	1990 CIP[1] CODE
4. Social sciences and related sciences		
41 ECONOMICS		
AGRICULTURAL ECONOMICS	601	01.0103
ECONOMICS	923	45.0601-45.0699
42 POLITICAL & RELATED SCIENCES		
PUBLIC POLICY ANALYSIS	902	44.0501
INTERNATIONAL REL & AFFAIRS	927	45.0901
POLITICAL SCIENCE & GOVERNMENT	928	45.1001-45.1099
43 PSYCHOLOGY		
EDUCATIONAL PSYCHOLOGY	704	13.0802
CLINICAL PSYCHOLOGY	891	42.0201
COUNSELING PSYCHOLOGY	892	42.0601
EXPERIMENTAL PSYCHOLOGY	893	42.0801
PSYCHOLOGY, GENERAL	894	42.0101
INDUSTRIAL/ORGANIZATIONAL PSYCH	895	42.0901
SOCIAL PSYCHOLOGY	896	42.1601
PSYCHOLOGY, OTHER	897	42.9999
COGNITIVE PSYCHOLOGY	897	42.0301
COMMUNITY PSYCHOLOGY	897	42.0401
DEVELOPMENTAL & CHILD PSYCH	897	42.0701
PHYSIOLOGICAL PSYCHOLOGY	897	42.1101
SCHOOL PSYCHOLOGY	897	42.1701
BIOPSYCHOLOGY	897	30.1001
44 SOCIOLOGY & ANTHROPOLOGY		
ANTHROPOLOGY	921	45.0201
ARCHEOLOGY	921	45.0301
CRIMINOLOGY	922	45.0401
SOCIOLOGY	929	45.1101
45 OTHER SOCIAL SCIENCES		
AREA STUDIES	620	05.0101-05.0199
ETHNIC & CULTURAL STUDIES	620	05.0201-05.0299
AREA, ETHNIC, CULT, OTHER	620	05.9999
LINGUISTICS	771	16.0102
PHILOSOPHY OF SCIENCE	861	45.0804 (PART)
GEOGRAPHY	924	45.0701-45.0702
HISTORY OF SCIENCE	925	45.0804 (PART)
URBAN AFFAIRS/STUDIES	930	45.1201
SOCIAL SCIENCES, OTHER	930	45.9999
SOCIAL SCIENCES, GENERAL	930	45.0101
DEMOGRAPHY/POP STUDIES	930	45.0501
PEACE & CONFLICT STUDIES	930	30.0501
GERONTOLOGY	930	30.1101
SCIENCE, TECHN, & SOCIETY	930	30.1501

	1997 NSF CODE	1990 CIP[1] CODE
5. Engineering		
51 AERO & ASTRO ENGINEERING		
AERO & ASTRO ENGINEERING	721	14.0201
52 CHEMICAL ENGINEERING		
CHEMICAL ENGINEERING	725	14.0701
53 CIVIL & ARCHITECTURAL ENGIN		
CIVIL ENGINEERING	726	14.0801-14.0899
ARCHITECTURAL ENGINEERING	723	14.0401
54 ELECTRICAL & COMPUTER ENGIN		
COMPUTER ENGINEERING	727	14.0901
SYSTEMS ENGINEERING	727	14.2701
ELECTRIC, ELECTRON, COMM EN	728	14.1001
55 INDUSTRIAL ENGINEERING		
INDUSTRIAL/MANUFACT ENGINEERING	733	14.1701
56 MECHANICAL ENGINEERING		
MECHANICAL ENGINEERING	735	14.1901
57 OTHER ENGINEERING		
AGRICULTURAL ENGINEERING	722	14.0301
BIOENGIN & BIOMED ENGINEERING	724	14.0501
ENGINEERING MECHANICS	729	14.1101
ENGINEERING PHYSICS	729	14.1201
ENGINEERING SCIENCE	729	14.1301
ENVIRONMENTAL ENGINEERING	730	14.1401
ENGINEERING, GENERAL	731	14.0101
GEOPHYSICAL ENGINEERING	732	14.1601
MATERIALS ENGINEERING	734	14.1801
CERAMIC SCIENCES & ENGINEERING	734	14.0601
TEXTILE SCIENCES & ENGINEERING	734	14.2801
POLYMER/PLASTICS ENGINEERING	734	14.3201
METALLURGICAL ENGINEERING	736	14.2001
MINING & MINERAL ENGINEERING	737	14.2101
NAVAL ARCH & MARINE ENGINEERING	738	14.2201
NUCLEAR ENGINEERING	739	14.2301
PETROLEUM ENGINEERING	740	14.2501
ENGINEERING DESIGN	741	14.2901
ENGIN/INDUSTRIAL MANAGEMENT	741	14.3001
MATERIALS SCIENCE	741	14.3101
GEOLOGICAL ENGINEERING	741	14.1501
OCEAN ENGINEERING	741	14.2401
ENGINEERING, OTHER	741	14.9999
Categories & Fields		
OTHER, AGRI-BUSINESS & MANAGE	602	01.0101-01.0102
OTHER, AGRI-BUSINESS & MANAGE	602	01.0104-01.9999
ARCHITECTURE	610	ALL 04
BUSINESS MANAGEMENT	651-659	ALL 08, ALL 52

Categories & Fields	1997 NSF CODE	1990 CIP[1] CODE
COMMUNICATIONS	661-663	ALL 09
COMPUTER PROGRAMMING	672	11.0201
DATA PROCESSING TECHNOLOGY	675	11.0301
OTHER, CONSERVATION	682	03.0101
OTHER, CONSERVATION	682	03.0201-03.0501
OTHER, CONSERVATION	682	03.0506-03.9999
CRIMINAL JUSTICE/PROTECT SERVICES	690	ALL 43
EDUCATION	701-703	ALL 13 EXCEPT 13.0802
EDUCATION	705-713	"
ENGINEERING-RELATED TECH	751-754	ALL 15
ENGINEERING-RELATED TECH	751-754	48.0101-48.0199
ENGLISH LANGUAGE, LITERATURE	760	ALL 23
OTHER, FOREIGN LANGUAGE	772	16.0101
OTHER, FOREIGN LANGUAGE	772	16.0103-16.9999
HEALTH PROFESSIONS	781-791	ALL 51
HOME ECONOMICS	800	ALL 19, ALL 20
LAW/PRELAW/LEGAL STUDIES	810	ALL 22
LIBERAL ARTS	820	ALL 24
LIBRARY SCIENCE	830	ALL 25
PARKS, RECREATION, LEISURE	850	ALL 31
OTHER, PHILOSOPHY, RELIGION	862	ALL 38, ALL 39
PUBLIC ADMINISTRATION	901	44.0401
OTHER, PUBLIC AFFAIRS	903	44.0201,44.9999
SOCIAL WORK	910	44.0701
HISTORY, OTHER	926	45.0801-45.0803
HISTORY, OTHER	926	45.0805-45.0899
VISUAL & PERFORMING ARTS	941-944	ALL 50
OTHER FIELDS	995	ALL 10, ALL 12
OTHER FIELDS	995	29.0101
OTHER FIELDS	995	30.1201
OTHER FIELDS	995	30.1301
OTHER FIELDS	995	30.1401
OTHER FIELDS	995	30.9999
OTHER FIELDS	995	ALL 32 THRU 37
OTHER FIELDS	995	ALL 41, ALL 46, ALL 47
OTHER FIELDS	995	48.0201-48.9999
OTHER FIELDS	995	ALL 49

[1]Classification of Instructional Programs

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SECTION B. DETAILED STATISTICAL TABLES

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HIGHLIGHTS

Characteristics of 1995 and 1996 Bachelor's and Master's Degree Recipients

- In 1995 and 1996, about 708,900 persons earned bachelor's degrees in the sciences and engineering (S&E) from U.S. colleges and universities, and about 149,500 persons earned S&E master's degrees (tables A-1 and A-2).

- Among 1995 and 1996 bachelor's S&E degree recipients, slightly more than half were males. Over two-thirds of computer and information science baccalaureates were male, and over four-fifths of engineering baccalaureates were male. Over two-thirds of psychology baccalaureates were female (table A-1).

- About 60 percent of S&E master's degree recipients were male and 40 percent were female (table A-2). Again, males earned a higher proportion of master's degrees in computer and information sciences and engineering, while females earned a higher proportion of the master's degrees in psychology.

- Black and Hispanic graduates each represented about 7 percent of 1995 and 1996 S&E baccalaureates, and Asians and Pacific Islanders represented 9 percent. About 1 percent of S&E baccalaureates were American Indian or Alaskan Native (table A-1).

- Black and Hispanic graduates each represented about 5 percent of 1995 and 1996 master's degree recipients, and Asians and Pacific Islanders represented 21 percent (over twice their representation among baccalaureates). Only about one-half of one percent of S&E master's graduates were American Indian or Alaskan Native (table A-2).

- In 1997, about 58 percent of recent S&E bachelor's degree recipients were less than 25 years old and 29 percent were age 25 to age 29. Only 13 percent were over the age of 30 (table A-5). Among master's graduates, the modal age group was age 25 to 29, representing 47 percent of 1995 and 1996 master's degree recipients. About 25 percent were age 30 to 34, and another 24 percent were over age 35 (table A-6).

- About 95 percent of 1995 and 1996 S&E baccalaureates were U.S. citizens (table A-7). However, among master's degree recipients, a smaller percentage, 78 percent, were U.S. citizens (table A-8).

Educational Characteristics of 1995 and 1996 Bachelor's and Master's Degree Recipients

- Nearly half of recent S&E bachelor's degree recipients (48 percent) and about two-thirds of master's degree recipients (65 percent) reported undergraduate GPAs of 3.25 or higher (tables B-1 and B-2).

- About 300,000, or 42 percent, of the 708,900 recent baccalaureates in S&E reported that they had attended a community college, and about 93,800, or 13 percent, had earned associate's degrees (table B-3). Among master's degree recipients, about one third (50,100) reported attending a community college, and about 10 percent (14,500) had associate's degrees (table B-4).

- Sources of financial support for 1995 and 1996 bachelor's degrees in S&E were quite varied (table B-5). More than half of graduates reported using earnings from employment; gifts from parents or relatives; scholarships, grants, or fellowships; and loans from a college, bank, or government. About 26 percent of baccalaureates reported assistantships or work-study as sources of college funds. About 7 percent reported employer assistance, 9 percent reported loans from parents or relatives, and 2 percent reported other sources of support.

- More than half of master's degree recipients reported earnings from employment and scholarships, grants, or fellowships as sources of support, and nearly half reported assistantships or work-study (table B-6). Gifts from parents or relatives were another important source of support, reported by about 35 percent master's graduates. Compared to baccalaureates, a much larger percentage of master's degree recipients reported employer support (27 percent).

- Over one-third of all bachelor's degree recipients (39 percent) borrowed $10,000 or more for their

undergraduate education, and 28 percent of them still owed $10,000 or more as of April 15, 1997 (tables B-7 and B-9).

- Among master's graduates, the findings are comparable: 37 percent borrowed $10,000 or more, and 24 percent still owed $10,000 or more as of April 15, 1997 (tables B-8 and B-10).

- Nearly half of 1995 and 1996 S&E bachelor's degree recipients (48 percent) reported that they had taken additional courses since earning their most recent degree (that is, the most recent degree as of the survey reference week of April 15, 1997). About 21 percent were full-time students (table B-11).

- About 41 percent of 1995 and 1996 master's degree recipients had taken courses since their most recent degree; 21 percent were full-time students (table B-12).

- Among those baccalaureates who had not taken additional courses since their most recent degree, 66 per-cent reported that it was very likely that they would do so in the future (table B-13). About 53 percent of master's graduates who had not taken courses reported that it was very likely they would do so (table B-14).

- Only 9 percent of recent S&E bachelor's degree recipients reported that they expected a bachelor's degree to be their highest degree (table B-17). About 53 percent reported that they expected their highest degree to be a master's degree, 27 percent expected their highest degree to be a doctorate, and about 11 percent expected to earn a professional degree.

- More than half of recent S&E master's graduates (54 percent) expected to earn a doctorate, and a small percentage (about 4 percent) expected to earn a professional degree (table B-18).

Employment Status of 1995 and 1996 Bachelor's and Master's Degree Recipients

- About 605,900 (85 percent) recent S&E bachelor's degree recipients were employed in April 1997 (table C-1). Of these, 519,200 were employed full time when all jobs are considered, and 487,700 were employed full time when only the principal job is considered. About 3 percent of bachelor's graduates were unemployed (that is, not working and looking for work or on layoff from a job). About 11 percent of recent bachelor's degree recipients were not in the labor force (that is, neither working nor looking for work) (table C-3).

- About 135,800 master's degree recipients (91 percent) were employed (table C-2). When counting all jobs, 116,000 were employed full time; 107,500 were employed full time when only the principal job was considered. About 2 percent of master's graduates were unemployed, and about 7 percent were not in the labor force (table C-4).

- Among both bachelor's and master's degree recipients, the majority of those not in the labor force were full-time students. Being a student was the most common reason for not working among both bachelor's graduates and master's graduates (tables C-7 and C-8). The next most common reason for both groups was that the graduate either did not need or did not want to work. About 17 percent of bachelor's graduates and 16 percent of master's graduates not working reported that a suitable job was not available.

Occupational Characteristics of 1995 and 1996 Bachelor's and Master's Degree Recipients

- About 69 percent of employed 1995 and 1996 S&E bachelor's degree recipients had non-S&E jobs in April 1997 (table D-1). Those with degrees in the sciences were far more likely than those with degrees in engineering to be employed in non-S&E fields (79 percent versus 21 percent). In contrast, only 34 percent of master's degree recipients were employed in non-S&E jobs; 45 percent of those with degrees in the sciences, and 9 percent of those with degrees in engineering (table D-2).

- Nearly half of S&E bachelor's degree recipients (47 percent) reported that they had career path jobs. About 40 percent of those without career path jobs reported that they were seeking such a position (table D-3). About 65 percent of S&E master's degree recipients reported holding career path jobs; of those who did not, 30 percent reported that they were seeking a career path job (table D-4).

- About 40 percent of employed S&E bachelor's graduates reported that their jobs were closely related to the field of their degree, and another 29 percent reported that they were somewhat related (table D-5). A greater proportion of master's degree recipients, 66 percent, reported holding jobs closely related to their degree fields, and another 25 percent reported jobs somewhat related to their degrees (table D-6).

- Female recipients of S&E baccalaureates were far more likely than males to hold non-S&E jobs (80 percent of females and 59 percent of males) (table D-7). Similarly, higher percentages of female master's degree recipients held non-S&E jobs than did their male counterparts (48 percent versus 25 percent) (table D-8). This may reflect to the fact that women are more likely to earn social sciences degrees that are more likely to lead to non S&E jobs and men are more likely to earn engineering degrees that more often lead to S&E jobs.

- Among employed S&E bachelor's degree graduates, the most commonly reported primary work activity was management, sales, and administration, reported by 38 percent of baccalaureates (table D-11). Research and development (R&D) was reported by 18 percent of graduates, and computer applications by 14 percent. About 12 percent of baccalaureate graduates reported teaching as their primary activity.

- The pattern of primary work activities was rather different for master's degree recipients (table D-12). R&D was the most commonly reported primary work activity (30 percent of employed master's graduates), followed by computer applications (21 percent), and management, sales, and administration (20 percent). About 13 percent of master's graduates reported teaching as their primary activity, a percentage very similar to bachelor's degree recipients.

- About 12 percent of employed 1995 and 1996 S&E bachelor's degree recipients reported that their work was supported by Federal Government agencies, including 12 percent of science graduates and 15 percent of engineering graduates (table D-15). Federal support was reported by 19 percent of employed master's degree recipients, with the same proportion of science graduates and of engineering graduates reporting Federal support (table D-16).

- Large percentages of both bachelor's and master's degree recipients reported participating in work-related training. The most common form of training for both degree levels was technical training in their occupational field, reported by 55 percent of bachelor's graduates and 59 percent of master's graduates. Fewer graduates received management training, general professional training, or other training (tables D-17 and D-18).

- About 40 percent of employed S&E bachelor's graduates reported that they were very satisfied with their jobs; an additional 42 percent reported being somewhat satisfied. About 18 percent reported being somewhat or very dissatisfied with their jobs (table D-21). The distribution is fairly similar for master's graduates: 46 percent reported that they were very satisfied, 41 percent somewhat satisfied, and 13 percent were somewhat or very dissatisfied (table D-22).

Employer Characteristics of 1995 and 1996 Bachelor's and Master's Degree Recipients

- About 69 percent of employed recent S&E bachelor's degree recipients worked in the private sector (excluding educational institutions) in April 1997, the great majority of these in private, for-profit companies (table E-1). About 21 percent of the employed graduates worked in the educational sector, and 10 percent in government.

- Among employed recent S&E master's degree recipients, the distribution across sectors was somewhat different—specifically, a greater proportion (30 percent) of master's graduates were employed in the education sector (table E-2). About 59 percent of recent master's degree graduates who were employed worked in the private sector (excluding educational institutions), 30 percent in the educational sector, and 11 percent in government.

- About 75 percent of employed bachelor's graduates and 83 percent of master's graduates had health insurance that was at least partially paid by their employers (tables E-5 and E-6). Paid vacation or

sick leave was reported by 75 percent of bachelor's and 79 percent of master's degree recipients. A majority of graduates also had a pension or retirement plan to which their employer contributed (59 percent of bachelor's and 66 percent of master's recipients). Smaller percentages had a profit-sharing plan (31 percent of bachelor's and 30 percent of master's recipients).

Salaries of 1995 and 1996 Bachelor's and Master's Degree Recipients

- Recent bachelor's degree recipients in S&E fields who were employed full time had a median annual salary of about $27,500 annually as of April 1997 (table F-1). The median salary was higher for those with engineering degrees ($38,000) than for those with degrees in the sciences ($25,000).

- The median salary for recent master's degree recipients who were employed full time was $42,000 in April 1997 (table F-2). Again, the median annual salary for those with engineering degrees was higher than for those in the sciences ($48,500 versus $37,400).

- At both the bachelor's and master's levels, male graduates had higher salaries than female graduates—$30,500 versus $24,000 at the bachelor's level and $47,000 versus $35,000 at the master's level. This overall difference primarily reflects two factors: (1) disparities in salaries between males and females with degrees in the sciences, and (2) a much higher proportion of males majoring in engineering where the median salary was higher although males and females with engineering degrees had more similar salaries.

- Comparisons by occupational field reveal that, among bachelor's graduates, those with S&E jobs had higher salaries than those with non-S&E jobs (table F-3). The median salary was $34,000 for scientists, $39,000 for engineers, and $24,400 for other occupations. In the sciences and in non-S&E occupations, males earned higher salaries than females, on average; this was not observed among engineers. Differences by occupational field were similar for master's degree recipients, although salaries were higher (table F-4).

- Baccalaureate graduates employed in private industry earned more, on average ($30,000), than those in the education sector ($22,000) or those in government ($25,000) (table F-5). At the master's degree level, however, the salaries of those in private industry and in government were more similar ($45,000 versus $42,000), while salaries of those in the education sector were lower ($32,500) (table F-6).

Table S-1. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by primary status, median salary, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	708,900	150,300	148,600	375,800	34,200	$27,500
Major type						
Total science	593,800	135,200	73,200	355,100	30,200	25,000
Total engineering	115,100	15,200	75,400	20,700	3,900	38,000
Major field						
Computer and information sciences	41,000	S	23,400	14,000	S	38,000
Life and related sciences, total	139,000	43,000	15,100	74,300	6,500	23,500
Agricultural and food sciences	14,000	1,800	1,600	10,200	S	23,500
Biological sciences	115,300	40,100	11,800	57,600	5,800	23,000
Environmental life sciences including forestry science	9,700	S	S	6,600	S	25,000
Mathematical and related sciences	26,800	5,100	4,000	16,900	S	28,000
Physical and related sciences, total	36,600	14,000	9,500	11,900	1,200	27,000
Chemistry, except biochemistry	20,100	8,600	5,200	5,700	S	27,000
Earth sciences, geology, and oceanography	9,200	2,200	2,400	4,200	S	25,000
Physics and astronomy	6,900	3,100	1,900	1,800	S	31,200
Other physical sciences	S	S	S	S	S	S
Psychology	138,000	32,800	8,700	89,400	7,100	22,000
Social and related sciences, total	212,400	38,000	12,500	148,600	13,400	25,000
Economics	33,300	3,500	3,300	25,300	S	30,000
Political science and related sciences	72,900	16,300	3,500	49,000	4,100	26,000
Sociology and anthropology	66,900	11,100	S	46,600	5,800	21,500
Other social sciences	39,300	7,000	2,500	27,600	2,300	25,000
Engineering, total	115,100	15,200	75,400	20,700	3,900	38,000
Aerospace and related engineering	3,000	700	1,500	800	S	35,500
Chemical engineering	11,600	2,000	7,500	1,700	S	42,000
Civil and architectural engineering	20,700	2,800	13,000	4,200	S	32,000
Electrical, electronic, computer and communications engineering	32,900	3,400	23,000	5,100	S	40,000
Industrial engineering	5,800	500	3,800	1,400	S	37,000
Mechanical engineering	27,900	3,000	19,900	4,200	S	39,000
Other engineering	13,200	2,800	6,800	3,300	S	35,700

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table S-2. Number of 1995 and 1996 science and engineering master's degree recipients, by primary status, median salary, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	149,500	30,900	72,600	41,000	5,000	$42,000
Major type						
Total science	102,500	24,000	37,600	36,800	4,100	37,400
Total engineering	47,000	6,800	35,000	4,200	900	48,500
Major field						
Computer and information sciences	18,200	S	13,400	3,300	S	50,000
Life and related sciences, total	15,300	4,900	5,800	4,200	S	32,000
Agricultural and food sciences	2,500	S	1,300	S	S	31,000
Biological sciences	10,500	4,000	3,200	2,800	S	32,000
Environmental life sciences including forestry sciences	2,400	S	1,200	S	S	36,000
Mathematical and related sciences	7,900	2,200	3,000	2,500	S	40,000
Physical and related sciences, total	9,700	3,500	4,100	1,700	S	35,000
Chemistry, except biochemistry	3,900	1,700	1,500	S	S	31,500
Earth sciences, geology, and oceanography	2,400	S	1,300	S	S	32,000
Physics and astronomy	3,000	1,300	1,200	S	S	41,000
Other physical sciences	S	S	S	S	S	S
Psychology	26,400	5,900	7,700	11,400	S	30,000
Social and related sciences, total	25,100	6,500	3,700	13,700	1,200	35,000
Economics	4,100	1,600	S	1,500	S	40,000
Political science and related sciences	8,100	2,300	S	4,500	S	35,000
Sociology and anthropology	4,200	1,500	S	1,700	S	28,000
Other social sciences	8,700	S	1,300	5,900	S	36,000
Engineering, total	47,000	6,800	35,000	4,200	900	48,500
Aerospace and related engineering	1,500	400	800	S	S	48,000
Chemical engineering	2,000	700	1,200	S	S	49,000
Civil and architectural engineering	6,500	S	5,000	S	S	40,000
Electrical, electronic, computer and communications engineering	16,100	2,400	12,500	1,100	S	54,000
Industrial engineering	3,200	S	2,200	S	S	49,000
Mechanical engineering	7,200	1,200	5,200	S	S	47,000
Other engineering	10,400	1,000	8,200	S	S	47,500

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table S-3. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by primary status, median salary, sex, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	708,900	150,300	148,600	375,800	34,200	$27,500
Total science						
Male	271,600	61,900	45,800	155,400	8,400	27,800
Female	322,200	73,200	27,400	199,700	21,800	23,000
Computer and information sciences						
Male	29,300	S	17,600	9,500	S	38,000
Female	11,800	S	5,800	4,400	S	36,400
Life and related sciences						
Male	67,100	22,000	8,100	35,200	S	25,000
Female	71,900	21,000	7,100	39,200	4,700	22,000
Mathematical and related sciences						
Male	13,500	2,500	2,500	8,200	S	30,000
Female	13,300	2,600	1,500	8,700	S	28,000
Physical and related sciences						
Male	23,400	8,400	7,000	7,100	900	29,000
Female	13,200	5,600	2,500	4,800	S	23,000
Psychology						
Male	39,000	8,900	3,700	25,700	S	22,500
Female	99,000	23,900	5,000	63,800	6,300	22,000
Social and related sciences						
Male	99,300	18,500	6,900	69,800	4,000	27,000
Female	113,100	19,400	5,600	78,700	9,300	24,000
Total engineering						
Male	94,800	11,900	62,400	17,200	3,200	38,000
Female	20,300	3,300	12,900	3,500	700	38,000
Aerospace and related engineering						
Male	2,700	600	1,300	800	S	35,000
Female	300	S	200	S	S	37,000
Chemical engineering						
Male	7,800	1,500	5,100	1,100	S	42,000
Female	3,800	S	2,500	S	S	41,000
Civil and architectural engineering						
Male	16,900	2,100	10,300	3,900	S	32,000
Female	3,700	S	2,700	S	S	33,000
Electrical, electronic, computer and communications engineering						
Male	28,900	2,700	20,500	4,400	S	40,000
Female	4,000	S	2,500	S	S	40,000
Industrial engineering						
Male	4,100	S	2,800	900	S	37,000
Female	1,700	S	1,100	500	S	37,200
Mechanical engineering						
Male	24,300	2,400	17,200	3,800	S	38,500
Female	3,700	S	2,600	S	S	39,000
Other engineering						
Male	10,100	2,200	5,400	2,200	S	36,000
Female	3,100	S	1,400	1,100	S	35,000

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table S-4. Number of 1995 and 1996 science and engineering master's degree recipients, by primary status, median salary, sex, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	149,500	30,900	72,600	41,000	5,000	$42,000
Total science						
Male	50,100	12,500	22,000	14,400	1,200	42,600
Female	52,500	11,500	15,600	22,400	2,900	33,000
Computer and information sciences						
Male	13,800	S	10,300	2,400	S	50,000
Female	4,400	S	3,100	S	S	48,000
Life and related sciences						
Male	8,000	2,700	3,200	2,000	S	32,000
Female	7,400	2,200	2,600	2,100	S	32,300
Mathematical and related sciences						
Male	4,700	1,400	1,800	1,400	S	42,000
Female	3,200	S	1,100	1,100	S	35,500
Physical and related sciences						
Male	7,000	2,700	3,100	1,100	S	37,500
Female	2,700	900	1,000	700	S	31,000
Psychology						
Male	5,900	1,500	S	2,500	S	29,000
Female	20,500	4,400	6,200	8,900	S	30,000
Social and related sciences						
Male	10,700	3,300	2,100	5,000	S	37,000
Female	14,400	3,200	1,700	8,600	S	33,000
Total engineering						
Male	38,900	5,800	28,700	3,700	S	49,000
Female	8,100	1,100	6,400	S	S	47,500
Aerospace and related engineering						
Male	1,300	400	700	S	S	49,000
Female	S	S	S	S	S	S
Chemical engineering						
Male	1,400	500	800	S	S	49,000
Female	600	S	500	S	S	49,000
Civil and architectural engineering						
Male	5,000	S	3,700	S	S	42,000
Female	1,500	S	1,300	S	S	35,000
Electrical, electronic, computer and communications engineering						
Male	13,700	2,000	10,700	900	S	53,400
Female	2,500	S	1,800	S	S	55,000
Industrial engineering						
Male	2,600	S	1,800	S	S	49,000
Female	S	S	S	S	S	S
Mechanical engineering						
Male	6,400	1,000	4,500	S	S	46,000
Female	S	S	S	S	S	S
Other engineering						
Male	8,600	S	6,600	S	S	47,700
Female	1,800	S	1,600	S	S	46,000

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table S-5. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by primary status, median salary, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	708,900	150,300	148,600	375,800	34,200	$27,500
Total science						
White, non-Hispanic	455,800	100,800	57,100	276,300	21,600	25,000
Black, non-Hispanic	42,800	8,200	4,200	27,900	2,500	24,000
Hispanic	41,100	9,000	4,400	25,100	2,600	24,000
Asian or Pacific Islander	49,000	15,800	7,200	22,600	3,400	28,800
American Indian/Alaskan Native	5,100	1,400	S	3,200	S	24,000
Computer and information sciences						
White, non-Hispanic	28,600	S	17,900	8,700	S	38,000
Black, non-Hispanic	4,400	S	2,000	2,000	S	35,000
Hispanic	2,200	S	S	1,100	S	34,000
Asian or Pacific Islander	5,700	S	2,400	S	S	40,000
American Indian/Alaskan Native	S	S	S	S	S	S
Life and related sciences						
White, non-Hispanic	109,800	30,200	13,100	62,400	4,100	23,000
Black, non-Hispanic	5,900	1,700	S	3,600	S	22,900
Hispanic	7,700	2,900	S	3,000	S	25,000
Asian or Pacific Islander	15,000	8,000	S	4,900	S	25,000
American Indian/Alaskan Native	S	S	S	S	S	S
Mathematical and related sciences						
White, non-Hispanic	21,200	4,000	2,800	13,800	S	28,000
Black, non-Hispanic	1,800	S	S	1,000	S	30,000
Hispanic	1,100	S	S	S	S	S
Asian or Pacific Islander	2,600	S	S	S	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Physical and related sciences						
White, non-Hispanic	30,000	11,500	8,100	9,800	S	27,000
Black, non-Hispanic	1,700	600	400	700	S	23,000
Hispanic	1,100	S	S	400	S	22,000
Asian or Pacific Islander	3,500	1,400	S	S	S	27,700
American Indian/Alaskan Native	S	S	S	S	S	S
Psychology						
White, non-Hispanic	105,500	26,400	6,100	68,000	5,000	22,000
Black, non-Hispanic	11,300	2,100	S	8,000	S	23,000
Hispanic	13,500	2,000	S	9,500	S	23,000
Asian or Pacific Islander	5,800	S	S	S	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	160,700	27,500	9,100	113,600	10,600	25,000
Black, non-Hispanic	17,600	3,500	S	12,600	1,200	23,000
Hispanic	15,600	3,600	S	10,600	S	25,000
Asian or Pacific Islander	16,400	3,000	S	10,200	S	28,000
American Indian/Alaskan Native	2,000	S	S	S	S	S

See end of table for notes and source.

Table S-5. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by primary status, median salary, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
Total engineering						
White, non-Hispanic	85,000	9,900	57,500	15,000	2,600	$38,000
Black, non-Hispanic	6,500	1,100	3,500	1,500	S	37,000
Hispanic	7,500	1,500	4,500	1,300	S	36,000
Asian or Pacific Islander	15,500	2,600	9,500	2,700	S	40,000
American Indian/Alaskan Native	600	S	S	S	S	S

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table S-6. Number of 1995 and 1996 science and engineering master's degree recipients, by primary status, median salary, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
All science and engineering fields	149,500	30,900	72,600	41,000	5,000	$42,000
Total science						
White, non-Hispanic	74,200	16,800	25,100	29,100	3,100	35,000
Black, non-Hispanic	5,500	1,400	1,500	2,300	S	35,000
Hispanic	4,900	1,300	1,400	2,000	S	32,000
Asian or Pacific Islander	17,300	4,400	9,500	3,000	S	47,000
American Indian/Alaskan Native	S	S	S	S	S	S
Computer and information sciences						
White, non-Hispanic	8,900	S	6,100	1,700	S	50,000
Black, non-Hispanic	700	S	S	S	S	42,000
Hispanic	S	S	S	S	S	S
Asian or Pacific Islander	8,200	S	6,700	S	S	50,000
American Indian/Alaskan Native	S	S	S	S	S	S
Life and related sciences						
White, non-Hispanic	12,100	3,100	4,900	3,600	S	32,000
Black, non-Hispanic	S	S	S	S	S	S
Hispanic	S	S	S	S	S	S
Asian or Pacific Islander	2,200	1,400	S	S	S	S
American Indian/Alaskan Native	S	S	S	S	S	
Mathematical and related sciences						
White, non-Hispanic	5,400	1,300	1,900	2,000	S	40,000
Black, non-Hispanic	S	S	S	S	S	S
Hispanic	S	S	S	S	S	S
Asian or Pacific Islander	1,600	S	S	S	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Physical and related sciences						
White, non-Hispanic	6,700	2,100	2,800	1,600	S	32,000
Black, non-Hispanic	S	S	S	S	S	S
Hispanic	S	S	S	S	S	S
Asian or Pacific Islander	2,300	1,100	1,000	S	S	44,000
American Indian/Alaskan Native	S	S	S	S	S	S
Psychology						
White, non-Hispanic	21,900	4,700	6,500	9,400	S	30,000
Black, non-Hispanic	1,800	S	S	S	S	30,000
Hispanic	1,500	S	S	900	S	32,000
Asian or Pacific Islander	S	S	S	S	S	S
American Indian/Alaskan Native	S	S	S	S	S	S
Social and related sciences						
White, non-Hispanic	19,200	4,800	2,800	10,800	S	34,000
Black, non-Hispanic	1,900	S	S	1,000	S	36,000
Hispanic	1,600	S	S	700	S	32,000
Asian or Pacific Islander	2,200	S	S	S	S	40,000
American Indian/Alaskan Native	S	S	S	S	S	S

See end of table for notes and source.

Table S-6. Number of 1995 and 1996 science and engineering master's degree recipients, by primary status, median salary, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Primary education and employment status				Median salary for full-time employed[1]
		Full-time student	Not full-time student			
			Employed in science and engineering	Employed in other occupation	Not employed and not full-time student	
Total engineering						
White, non-Hispanic	29,100	3,700	22,000	2,900	S	$50,000
Black, non-Hispanic	1,600	S	1,000	S	S	48,000
Hispanic	2,200	S	1,200	S	S	46,000
Asian or Pacific Islander	14,000	2,200	10,800	S	S	47,500
American Indian/Alaskan Native	S	S	S	S	S	S

[1] Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-1. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	708,900	366,400	342,500	540,800	49,300	48,600	64,500	5,700
Major type								
Total science	593,800	271,600	322,200	455,800	42,800	41,100	49,000	5,100
Total engineering	115,100	94,800	20,300	85,000	6,500	7,500	15,500	600
Major field								
Computer and information sciences	41,000	29,300	11,800	28,600	4,400	2,200	5,700	S
Life and related sciences, total	139,000	67,100	71,900	109,800	5,900	7,700	15,000	S
Agricultural and food sciences	14,000	8,100	5,900	12,900	S	S	S	S
Biological sciences	115,300	53,800	61,500	87,900	5,600	7,000	14,400	S
Environmental life sciences including forestry sciences	9,700	5,200	4,500	9,000	S	S	S	S
Mathematical and related sciences	26,800	13,500	13,300	21,200	1,800	1,100	2,600	S
Physical and related sciences, total	36,600	23,400	13,200	30,000	1,700	1,100	3,500	S
Chemistry, except biochemistry	20,100	11,600	8,500	15,600	1,300	700	2,400	S
Earth sciences, geology, and oceanography	9,200	5,900	3,300	8,300	S	S	S	S
Physics and astronomy	6,900	5,600	1,300	5,700	300	200	600	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	138,000	39,000	99,000	105,500	11,300	13,500	5,800	S
Social and related sciences, total	212,400	99,300	113,100	160,700	17,600	15,600	16,400	2,000
Economics	33,300	21,700	11,600	24,600	2,100	2,000	4,200	S
Political science and related sciences	72,900	38,600	34,300	55,400	5,400	6,000	5,400	S
Sociology and anthropology	66,900	24,700	42,200	49,000	7,400	5,300	4,300	S
Other social sciences	39,300	14,400	24,900	31,700	2,700	2,200	S	S
Engineering, total	115,100	94,800	20,300	85,000	6,500	7,500	15,500	600
Aerospace and related engineering	3,000	2,700	300	2,400	S	200	300	S
Chemical engineering	11,600	7,800	3,800	8,300	900	800	1,600	S
Civil and architectural engineering	20,700	16,900	3,700	17,100	1,100	1,300	S	S
Electrical, electronic, computer and communications engineering	32,900	28,900	4,000	20,900	2,300	2,500	7,100	S
Industrial engineering	5,800	4,100	1,700	4,300	400	500	S	S
Mechanical engineering	27,900	24,300	3,700	22,000	1,300	1,600	3,000	S
Other engineering	13,200	10,100	3,100	10,100	S	700	1,900	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-2. Number of 1995 and 1996 science and engineering master's degree recipients, by sex, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All science and engineering fields	149,500	89,000	60,600	103,200	7,100	7,100	31,300	800
Major type								
Total science	102,500	50,100	52,500	74,200	5,500	4,900	17,300	S
Total engineering	47,000	38,900	8,100	29,100	1,600	2,200	14,000	S
Major field								
Computer and information sciences	18,200	13,800	4,400	8,900	700	S	8,200	S
Life and related sciences, total	15,300	8,000	7,400	12,100	S	S	2,200	S
Agricultural and food sciences	2,500	1,400	1,100	2,000	S	S	S	S
Biological sciences	10,500	5,100	5,300	8,000	S	S	1,700	S
Environmental life sciences including forestry sciences	2,400	1,500	S	2,100	S	S	S	S
Mathematical and related sciences	7,900	4,700	3,200	5,400	S	S	1,600	S
Physical and related sciences, total	9,700	7,000	2,700	6,700	S	S	2,300	S
Chemistry, except biochemistry	3,900	2,300	1,600	2,600	S	S	1,100	S
Earth sciences, geology, and oceanography	2,400	1,800	600	2,000	S	S	S	S
Physics and astronomy	3,000	2,600	S	1,800	S	S	1,000	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	26,400	5,900	20,500	21,900	1,800	1,500	S	S
Social and related sciences, total	25,100	10,700	14,400	19,200	1,900	1,600	2,200	S
Economics	4,100	2,900	1,300	2,900	S	S	S	S
Political science and related sciences	8,100	3,900	4,100	6,200	S	S	S	S
Sociology and anthropology	4,200	1,300	2,900	3,300	S	S	S	S
Other social sciences	8,700	2,700	6,000	6,800	1,000	S	S	S
Engineering, total	47,000	38,900	8,100	29,100	1,600	2,200	14,000	S
Aerospace and related engineering	1,500	1,300	S	1,100	S	S	S	S
Chemical engineering	2,000	1,400	600	1,000	S	S	800	S
Civil and architectural engineering	6,500	5,000	1,500	4,400	S	S	1,500	S
Electrical, electronic, computer and communications engineering	16,100	13,700	2,500	9,000	600	500	5,900	S
Industrial engineering	3,200	2,600	S	2,100	S	S	S	S
Mechanical engineering	7,200	6,400	S	4,000	S	S	2,500	S
Other engineering	10,400	8,600	1,800	7,400	S	S	2,400	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-3. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by race/ethnicity, by sex, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	286,600	254,200	19,800	29,500	22,400	26,300	35,300	29,200	2,300	3,400
Major type										
Total science	215,200	240,600	15,600	27,300	16,400	24,800	22,700	26,300	1,800	3,300
Total engineering	71,400	13,600	4,200	2,200	6,000	1,500	12,600	2,900	S	S
Major field										
Computer and information sciences	21,200	7,400	2,500	1,900	1,200	S	4,300	S	S	S
Life and related sciences, total	55,200	54,600	1,800	4,100	3,200	4,500	6,700	8,300	S	S
Agricultural and food sciences	7,700	5,100	S	S	S	S	S	S	S	S
Biological sciences	42,400	45,500	1,600	3,900	2,800	4,200	6,700	7,700	S	S
Environmental life sciences including forestry sciences	5,100	3,900	S	S	S	S	S	S	S	S
Mathematical and related sciences	10,400	10,800	1,000	800	S	S	S	S	S	S
Physical and related sciences, total	19,500	10,500	900	800	600	500	2,200	1,300	S	S
Chemistry, except biochemistry	9,300	6,300	600	700	S	S	1,400	S	S	S
Earth sciences, geology, and oceanography	5,300	3,000	S	S	S	S	S	S	S	S
Physics and astronomy	4,700	1,000	S	S	S	S	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	30,200	75,300	3,000	8,400	3,700	9,900	S	4,200	S	S
Social and related sciences, total	78,700	82,000	6,400	11,200	6,900	8,700	6,600	9,800	S	S
Economics	16,600	8,100	S	1,000	1,300	S	S	S	S	S
Political science and related sciences	31,100	24,300	2,500	3,000	2,600	3,300	S	3,300	S	S
Sociology and anthropology	18,300	30,600	2,300	5,100	2,000	3,400	S	S	S	S
Other social sciences	12,700	19,000	S	2,100	S	1,300	S	S	S	S
Engineering, total	71,400	13,600	4,200	2,200	6,000	1,500	12,600	2,900	S	S
Aerospace and related engineering	2,100	300	S	S	200	S	300	S	S	S
Chemical engineering	6,000	2,300	S	600	500	S	900	S	S	S
Civil and architectural engineering	14,100	3,000	800	S	1,000	S	S	S	S	S
Electrical, electronic, computer and communications engineering	19,100	1,800	1,600	S	2,100	S	5,900	S	S	S
Industrial engineering	3,200	1,100	S	200	300	200	S	S	S	S
Mechanical engineering	19,200	2,800	1,000	S	1,400	S	2,700	S	S	S
Other engineering	7,700	2,400	S	S	500	S	1,500	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-4. Number of 1995 and 1996 science and engineering master's degree recipients, by race/ethnicity, by sex, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Race/ethnicity									
	White, non-Hispanic		Black, non-Hispanic		Hispanic		Asian or Pacific Islander		American Indian/ Alaskan Native	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All science and engineering fields	59,500	43,700	3,500	3,600	3,700	3,400	21,700	9,600	S	S
Major type										
Total science	35,100	39,000	2,200	3,300	2,000	2,900	10,400	6,900	S	S
Total engineering	24,400	4,600	1,300	S	1,700	S	11,300	2,700	S	S
Major field										
Computer and information sciences	7,500	1,400	S	S	S	S	5,700	2,500	S	S
Life and related sciences, total	6,400	5,700	S	S	S	S	S	S	S	S
Agricultural and food sciences	1,200	S	S	S	S	S	S	S	S	S
Biological sciences	3,900	4,000	S	S	S	S	S	S	S	S
Environmental life sciences including forestry sciences	1,300	S	S	S	S	S	S	S	S	S
Mathematical and related sciences	3,500	1,900	S	S	S	S	S	S	S	S
Physical and related sciences, total	4,800	1,900	S	S	S	S	1,800	S	S	S
Chemistry, except biochemistry	1,500	1,100	S	S	S	S	S	S	S	S
Earth sciences, geology, and oceanography	1,500	S	S	S	S	S	S	S	S	S
Physics and astronomy	1,600	S	S	S	S	S	900	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S	S
Psychology	4,800	17,100	S	1,300	S	1,300	S	S	S	S
Social and related sciences, total	8,100	11,100	900	1,100	800	800	S	1,400	S	S
Economics	2,000	S	S	S	S	S	S	S	S	S
Political science and related sciences	3,100	3,100	S	S	S	S	S	S	S	S
Sociology and anthropology	S	2,300	S	S	S	S	S	S	S	S
Other social sciences	2,000	4,800	S	800	S	S	S	S	S	S
Engineering, total	24,400	4,600	1,300	S	1,700	S	11,300	2,700	S	S
Aerospace and related engineering	1,000	S	S	S	S	S	S	S	S	S
Chemical engineering	700	S	S	S	S	S	600	S	S	S
Civil and architectural engineering	3,400	1,000	S	S	S	S	1,200	S	S	S
Electrical, electronic, computer and communications engineering	8,000	1,000	600	S	S	S	4,700	1,200	S	S
Industrial engineering	1,500	S	S	S	S	S	S	S	S	S
Mechanical engineering	3,500	S	S	S	S	S	2,300	S	S	S
Other engineering	6,300	1,100	S	S	S	S	1,800	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of respondent data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-5. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by age and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Age			
		Less than 25	25–29	30–34	35 or more
All science and engineering fields	708,900	408,700	207,300	38,600	54,300
Major type					
Total science	593,800	349,900	166,000	29,400	48,400
Total engineering	115,100	58,800	41,300	9,200	5,900
Major field					
Computer and information sciences	41,000	15,000	15,500	4,500	6,100
Life and related sciences, total	139,000	89,300	37,200	5,900	6,600
Agricultural and food sciences	14,000	7,800	5,100	S	S
Biological sciences	115,300	76,400	28,700	4,800	5,400
Environmental life sciences including forestry sciences	9,700	5,200	3,400	S	S
Mathematical and related sciences	26,800	15,200	8,300	S	1,700
Physical and related sciences, total	36,600	22,500	9,900	2,300	1,800
Chemistry, except biochemistry	20,100	13,200	4,700	S	S
Earth sciences, geology, and oceanography	9,200	5,100	2,700	600	700
Physics and astronomy	6,900	4,100	2,200	S	S
Other physical sciences	S	S	S	S	S
Psychology	138,000	83,300	35,300	5,700	13,600
Social and related sciences, total	212,400	124,500	59,900	9,400	18,600
Economics	33,300	21,600	8,900	S	S
Political science and related sciences	72,900	49,600	17,200	2,800	3,300
Sociology and anthropology	66,900	34,000	22,100	2,900	7,800
Other social sciences	39,300	19,300	11,600	2,400	6,000
Engineering, total	115,100	58,800	41,300	9,200	5,900
Aerospace and related engineering	3,000	1,800	1,000	S	S
Chemical engineering	11,600	7,200	3,500	S	S
Civil and architectural engineering	20,700	9,500	8,300	1,600	S
Electrical, electronic, computer and communications engineering	32,900	13,900	13,000	3,700	2,300
Industrial engineering	5,800	2,800	2,400	S	S
Mechanical engineering	27,900	15,400	9,500	2,300	S
Other engineering	13,200	8,200	3,500	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-6. Number of 1995 and 1996 science and engineering master's degree recipients, by age and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Age			
		Less than 25	25–29	30–34	35 or more
All science and engineering fields	149,500	6,700	70,500	37,000	35,300
Major type					
Total science	102,500	4,200	47,300	23,700	27,400
Total engineering	47,000	2,500	23,300	13,400	7,900
Major field					
Computer and information sciences	18,200	S	7,400	5,000	5,100
Life and related sciences, total	15,300	S	7,200	3,700	3,600
Agricultural and food sciences	2,500	S	1,200	S	S
Biological sciences	10,500	S	5,300	2,500	1,800
Environmental life sciences including forestry sciences	2,400	S	S	S	1,100
Mathematical and related sciences	7,900	S	3,400	2,400	1,500
Physical and related sciences, total	9,700	S	5,200	2,700	1,300
Chemistry, except biochemistry	3,900	S	2,300	700	S
Earth sciences, geology, and oceanography	2,400	S	1,100	800	S
Physics and astronomy	3,000	S	1,600	1,100	S
Other physical sciences	S	S	S	S	S
Psychology	26,400	S	12,600	4,100	9,300
Social and related sciences, total	25,100	1,200	11,500	5,700	6,700
Economics	4,100	S	2,000	S	S
Political science and related sciences	8,100	S	4,600	1,600	1,600
Sociology and anthropology	4,200	S	2,300	S	1,200
Other social sciences	8,700	S	2,600	2,300	3,200
Engineering, total	47,000	2,500	23,300	13,400	7,900
Aerospace and related engineering	1,500	S	800	S	S
Chemical engineering	2,000	S	1,000	400	S
Civil and architectural engineering	6,500	S	3,100	1,600	1,400
Electrical, electronic, computer and communications engineering	16,100	800	8,100	4,700	2,600
Industrial engineering	3,200	S	1,600	1,000	S
Mechanical engineering	7,200	S	4,100	2,100	S
Other engineering	10,400	S	4,500	3,300	2,200

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-7. Number of 1995 and 1996 science and engineering bachelor's degree recipients residing in the United States who are U.S. citizens and foreign-born, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	U.S. citizens[1]	Foreign-born[1]
All science and engineering fields	708,900	676,600	83,800
Major type			
Total science	593,800	570,000	64,100
Total engineering	115,100	106,600	19,600
Major field			
Computer and information sciences	41,000	35,400	10,100
Life and related sciences, total	139,000	133,900	14,800
Agricultural and food sciences	14,000	13,700	S
Biological sciences	115,300	110,400	13,900
Environmental life sciences including forestry sciences	9,700	9,700	S
Mathematical and related sciences	26,800	24,700	4,200
Physical and related sciences, total	36,600	34,700	4,100
Chemistry, except biochemistry	20,100	19,000	2,900
Earth sciences, geology, and oceanography	9,200	9,000	S
Physics and astronomy	6,900	6,400	800
Other physical sciences	S	S	S
Psychology	138,000	135,400	9,800
Social and related sciences, total	212,400	206,000	21,300
Economics	33,300	31,100	5,600
Political science and related sciences	72,900	70,400	7,900
Sociology and anthropology	66,900	65,700	4,700
Other social sciences	39,300	38,800	3,000
Engineering, total	115,100	106,600	19,600
Aerospace and related engineering	3,000	2,800	400
Chemical engineering	11,600	11,200	1,500
Civil and architectural engineering	20,700	19,700	2,700
Electrical, electronic, computer and communications engineering	32,900	28,400	8,700
Industrial engineering	5,800	5,400	800
Mechanical engineering	27,900	26,600	3,900
Other engineering	13,200	12,600	1,600

[1]Some U.S. citizens are foreign-born, including those who are naturalized citizens and others who were U.S. citizens at birth, but were born outside the U.S. Therefore, the separate columns do not add to the "Total recipients" total.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-8. Number of 1995 and 1996 science and engineering master's degree recipients residing in the United States who are U.S. citizens and foreign-born, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	U.S. citizens[1]	Foreign-born[1]
All science and engineering fields	149,500	116,600	43,000
Major type			
Total science	102,500	83,800	24,600
Total engineering	47,000	32,900	18,400
Major field			
Computer and information sciences	18,200	10,000	9,400
Life and related sciences, total	15,300	13,900	2,600
Agricultural and food sciences	2,500	2,100	S
Biological sciences	10,500	9,500	1,900
Environmental life sciences including forestry sciences	2,400	2,300	S
Mathematical and related sciences	7,900	5,700	2,500
Physical and related sciences, total	9,700	7,100	3,200
Chemistry, except biochemistry	3,900	2,900	1,300
Earth sciences, geology, and oceanography	2,400	2,100	S
Physics and astronomy	3,000	1,800	1,400
Other physical sciences	S	S	S
Psychology	26,400	25,100	2,200
Social and related sciences, total	25,100	22,000	4,600
Economics	4,100	2,900	1,500
Political science and related sciences	8,100	6,800	1,700
Sociology and anthropology	4,200	3,800	S
Other social sciences	8,700	8,600	S
Engineering, total	47,000	32,900	18,400
Aerospace and related engineering	1,500	1,200	400
Chemical engineering	2,000	1,200	900
Civil and architectural engineering	6,500	5,100	2,000
Electrical, electronic, computer and communications engineering	16,100	10,400	7,800
Industrial engineering	3,200	2,400	1,100
Mechanical engineering	7,200	4,700	3,000
Other engineering	10,400	8,000	3,300

[1]Some U.S. citizens are foreign-born, including those who are naturalized citizens and others who were U.S. citizens at birth, but were born outside the U.S. Therefore, the separate columns do not add to the "Total recipients" total.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-9. Number of 1995 and 1996 science and engineering bachelor's degree recipients residing in the United States who are native-born or naturalized U.S. citizens, and number who are permanent or temporary residents, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	U.S. citizen		Non-U.S. citizen	
		From birth	Naturalized	Permanent resident	Temporary resident/other
All science and engineering fields	708,900	635,000	41,700	19,000	13,300
Major type					
Total science	593,800	538,100	31,900	15,100	8,700
Total engineering	115,100	96,900	9,700	3,900	4,600
Major field					
Computer and information sciences	41,000	31,700	3,600	2,500	3,100
Life and related sciences, total	139,000	125,800	8,000	3,900	S
Agricultural and food sciences	14,000	13,700	S	S	S
Biological sciences	115,300	102,600	7,900	3,700	S
Environmental life sciences including forestry sciences	9,700	9,600	S	S	S
Mathematical and related sciences	26,800	22,900	1,800	S	S
Physical and related sciences, total	36,600	32,800	2,000	1,100	S
Chemistry, except biochemistry	20,100	17,400	1,500	S	S
Earth sciences, geology, and oceanography	9,200	8,800	S	S	S
Physics and astronomy	6,900	6,200	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	138,000	130,300	5,000	2,300	S
Social and related sciences, total	212,400	194,500	11,500	4,200	S
Economics	33,300	28,400	2,700	S	S
Political science and related sciences	72,900	66,300	4,100	1,900	S
Sociology and anthropology	66,900	63,300	S	S	S
Other social sciences	39,300	36,500	S	S	S
Engineering, total	115,100	96,900	9,700	3,900	4,600
Aerospace and related engineering	3,000	2,700	S	S	S
Chemical engineering	11,600	10,200	900	S	S
Civil and architectural engineering	20,700	18,200	1,600	S	S
Electrical, electronic, computer and communications engineering	32,900	24,400	4,000	2,200	2,300
Industrial engineering	5,800	5,100	S	S	S
Mechanical engineering	27,900	24,400	2,100	S	S
Other engineering	13,200	11,900	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table A-10. Number of 1995 and 1996 science and engineering master's degree recipients residing in the United States who are native-born or naturalized U.S. citizens, and number who are permanent or temporary residents, by major field of degree: April 1997

Major field of 1995-96 master's degree	Total recipients	U.S. citizen		Non-U.S. citizen	
		From birth	Naturalized	Permanent resident	Temporary resident
All science and engineering fields	149,500	108,200	8,400	9,300	23,500
Major type					
Total science	102,500	79,200	4,600	6,000	12,800
Total engineering	47,000	29,100	3,800	3,400	10,700
Major field					
Computer and information sciences	18,200	8,800	1,100	2,600	5,600
Life and related sciences, total	15,300	12,900	S	S	S
Agricultural and food sciences	2,500	2,000	S	S	S
Biological sciences	10,500	8,700	S	S	S
Environmental life sciences including forestry sciences	2,400	2,200	S	S	S
Mathematical and related sciences	7,900	5,500	S	S	1,600
Physical and related sciences, total	9,700	6,600	S	S	2,100
Chemistry, except biochemistry	3,900	2,600	S	S	S
Earth sciences, geology, and oceanography	2,400	2,000	S	S	S
Physics and astronomy	3,000	1,700	S	S	1,100
Other physical sciences	S	S	S	S	S
Psychology	26,400	24,400	S	S	S
Social and related sciences, total	25,100	20,800	1,200	S	2,300
Economics	4,100	2,700	S	S	S
Political science and related sciences	8,100	6,500	S	S	S
Sociology and anthropology	4,200	3,600	S	S	S
Other social sciences	8,700	8,100	S	S	S
Engineering, total	47,000	29,100	3,800	3,400	10,700
Aerospace and related engineering	1,500	1,100	S	S	S
Chemical engineering	2,000	1,100	S	S	700
Civil and architectural engineering	6,500	4,700	S	S	S
Electrical, electronic, computer and communications engineering	16,100	8,400	2,000	1,400	4,400
Industrial engineering	3,200	2,200	S	S	S
Mechanical engineering	7,200	4,200	S	S	1,900
Other engineering	10,400	7,300	S	S	1,900

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-1. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by undergraduate grade point average (GPA) and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Undergraduate GPA		
		3.25 or higher	2.75 to 3.24	Below 2.75
All science and engineering fields	708,900	342,000	284,100	82,600
Major type				
Total science	593,800	293,600	235,200	64,700
Total engineering	115,100	48,400	48,800	18,000
Major field				
Computer and information sciences	41,000	20,200	16,500	4,300
Life and related sciences, total	139,000	69,500	55,100	14,200
Agricultural and food sciences	14,000	5,400	6,100	2,400
Biological sciences	115,300	59,900	44,600	10,700
Environmental life sciences including forestry sciences	9,700	4,200	4,400	S
Mathematical and related sciences	26,800	14,200	10,600	2,000
Physical and related sciences, total	36,600	19,900	12,200	4,400
Chemistry, except biochemistry	20,100	12,500	5,300	2,300
Earth sciences, geology, and oceanography	9,200	3,300	4,500	1,300
Physics and astronomy	6,900	3,900	2,300	700
Other physical sciences	S	S	S	S
Psychology	138,000	74,400	48,900	14,700
Social and related sciences, total	212,400	95,400	91,900	25,000
Economics	33,300	15,300	11,900	6,100
Political science and related sciences	72,900	36,000	29,900	6,900
Sociology and anthropology	66,900	23,700	34,700	8,400
Other social sciences	39,300	20,400	15,400	3,500
Engineering, total	115,100	48,400	48,800	18,000
Aerospace and related engineering	3,000	1,300	1,300	500
Chemical engineering	11,600	5,600	4,900	1,200
Civil and architectural engineering	20,700	7,800	8,700	4,200
Electrical, electronic, computer and communications engineering	32,900	14,200	13,300	5,500
Industrial engineering	5,800	2,200	2,800	900
Mechanical engineering	27,900	11,900	12,300	3,800
Other engineering	13,200	5,600	5,600	2,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons data reliability. GPA=Grade point average.

NOTES: Details may not add to totals because of rounding and because a small number of graduates who reported that their undergraduate courses were ungraded are excluded.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-2. Number of 1995 and 1996 science and engineering master's degree recipients, by undergraduate grade point average (GPA) and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Undergraduate GPA		
		3.25 or higher	2.75 to 3.24	Below 2.75
All science and engineering fields	149,500	97,300	42,700	8,800
Major type				
Total science	102,500	67,300	28,600	6,200
Total engineering	47,000	30,000	14,100	2,700
Major field				
Computer and information sciences	18,200	12,500	4,300	1,200
Life and related sciences, total	15,300	8,600	5,500	1,300
Agricultural and food sciences	2,500	1,500	S	S
Biological sciences	10,500	5,700	3,900	S
Environmental life sciences including forestry sciences	2,400	1,300	S	S
Mathematical and related sciences	7,900	5,300	2,100	S
Physical and related sciences, total	9,700	6,400	2,700	S
Chemistry, except biochemistry	3,900	2,700	1,000	S
Earth sciences, geology, and oceanography	2,400	1,500	700	S
Physics and astronomy	3,000	2,100	800	S
Other physical sciences	S	S	S	S
Psychology	26,400	18,300	6,900	1,000
Social and related sciences, total	25,100	16,400	7,100	1,500
Economics	4,100	2,900	1,000	S
Political science and related sciences	8,100	5,600	2,100	S
Sociology and anthropology	4,200	3,200	800	S
Other social sciences	8,700	4,600	3,300	S
Engineering, total	47,000	30,000	14,100	2,700
Aerospace and related engineering	1,500	1,000	400	S
Chemical engineering	2,000	1,400	400	S
Civil and architectural engineering	6,500	3,600	2,400	S
Electrical, electronic, computer and communications engineering	16,100	11,500	4,000	S
Industrial engineering	3,200	1,900	1,200	S
Mechanical engineering	7,200	4,700	2,200	S
Other engineering	10,400	5,800	3,500	1,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability. GPA=Grade point average.

NOTES: Details may not add to totals because of rounding and because a small number of graduates who reported that their undergraduate courses were ungraded are excluded.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-3. Number of 1995 and 1996 science and engineering bachelor's degree recipients who attended community college and earned associate's degrees, by major field of bachelor's degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Community college		Associate's degree	
		Number attended community college	Percent attended community college	Number with associate's degree	Percent with associate's degree
All science and engineering fields	708,900	300,000	42	93,800	13
Major type					
Total science	593,800	252,700	43	81,200	14
Total engineering	115,100	47,300	41	12,600	11
Major field					
Computer and information sciences	41,000	17,600	43	8,600	21
Life and related sciences, total	139,000	56,300	41	13,800	10
Agricultural and food sciences	14,000	6,200	44	2,900	21
Biological sciences	115,300	45,000	39	9,500	8
Environmental life sciences including forestry sciences	9,700	5,200	54	S	S
Mathematical and related sciences	26,800	9,000	34	2,200	8
Physical and related sciences, total	36,600	13,700	37	3,400	9
Chemistry, except biochemistry	20,100	7,400	37	1,800	9
Earth sciences, geology, and oceanography	9,200	3,800	41	1,100	12
Physics and astronomy	6,900	2,300	33	500	7
Other physical sciences	S	S	S	S	S
Psychology	138,000	63,700	46	22,500	16
Social and related sciences, total	212,400	92,400	44	30,600	14
Economics	33,300	12,500	38	2,900	9
Political science and related sciences	72,900	25,900	36	6,600	9
Sociology and anthropology	66,900	34,600	52	13,800	21
Other social sciences	39,300	19,300	49	7,300	19
Engineering, total	115,100	47,300	41	12,600	11
Aerospace and related engineering	3,000	900	30	200	7
Chemical engineering	11,600	4,000	34	S	S
Civil and architectural engineering	20,700	9,200	44	2,600	13
Electrical, electronic, computer and communications engineering	32,900	14,500	44	4,000	12
Industrial engineering	5,800	2,200	38	700	12
Mechanical engineering	27,900	11,500	41	3,200	11
Other engineering	13,200	5,000	38	1,300	10

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-4. Number of 1995 and 1996 science and engineering master's degree recipients who attended community college and earned associate's degree, by major field of master's degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Community college		Associate's degree	
		Number attended community college	Percent attended community college	Number with associate's degree	Percent with associate's degree
All science and engineering fields	149,500	50,100	34	14,500	10
Major type					
Total science	102,500	35,600	35	11,000	10
Total engineering	47,000	14,500	31	3,400	7
Major field					
Computer and information sciences	18,200	5,200	29	2,200	12
Life and related sciences, total	15,300	5,900	39	1,500	10
Agricultural and food sciences	2,500	S	S	S	S
Biological sciences	10,500	3,900	37	S	S
Environmental life sciences including forestry sciences	2,400	1,200	50	S	S
Mathematical and related sciences	7,900	2,400	30	S	S
Physical and related sciences, total	9,700	2,200	23	S	S
Chemistry, except biochemistry	3,900	900	23	S	S
Earth sciences, geology, and oceanography	2,400	600	25	S	S
Physics and astronomy	3,000	S	S	S	S
Other physical sciences	S	S	S	S	S
Psychology	26,400	11,600	44	3,900	15
Social and related sciences, total	25,100	8,400	33	2,300	9
Economics	4,100	1,400	34	S	S
Political science and related sciences	8,100	2,400	30	S	S
Sociology and anthropology	4,200	1,600	38	S	S
Other social sciences	8,700	3,000	34	S	S
Engineering, total	47,000	14,500	31	3,400	7
Aerospace and related engineering	1,500	400	27	S	S
Chemical engineering	2,000	S	S	S	S
Civil and architectural engineering	6,500	2,500	38	S	S
Electrical, electronic, computer and communications engineering	16,100	4,700	29	1,200	7
Industrial engineering	3,200	1,000	31	S	S
Mechanical engineering	7,200	2,000	28	S	S
Other engineering	10,400	3,500	34	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-5. Number of 1995 and 1996 science and engineering bachelor's degree recipients who received financial support from various sources for those degrees, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Sources of support							
		Earnings from employment	Gifts from parents/ relatives	Scholarships, grants, fellowships	Loans from college, bank, government	Assistantships, work study	Employer assistance	Loans from parents or relatives	Other sources
All science and engineering fields	708,900	453,300	513,000	403,700	365,600	182,600	48,100	60,700	10,800
Major type									
Total science	593,800	372,300	431,600	331,000	305,100	153,800	36,800	48,200	8,900
Total engineering	115,100	81,100	81,400	72,700	60,500	28,800	11,300	12,500	2,000
Major field									
Computer and information sciences	41,000	25,800	23,900	23,400	19,500	12,300	7,200	5,500	S
Life and related sciences, total	139,000	91,200	103,900	83,700	69,800	38,400	7,400	11,600	S
Agricultural and food sciences	14,000	10,900	9,300	8,700	6,800	3,600	S	S	S
Biological sciences	115,300	73,500	86,800	70,100	57,800	31,800	5,700	9,700	S
Environmental life sciences including forestry sciences	9,700	6,800	7,800	4,900	5,200	3,000	S	S	S
Mathematical and related sciences	26,800	17,700	19,300	20,000	13,400	8,500	1,500	2,500	S
Physical and related sciences, total	36,600	22,700	26,200	23,500	18,000	11,800	3,000	2,600	S
Chemistry, except biochemistry	20,100	11,600	13,900	13,800	9,900	6,800	1,400	S	S
Earth sciences, geology, and oceanography	9,200	6,000	6,800	5,000	4,700	2,300	1,000	800	S
Physics and astronomy	6,900	4,800	5,200	4,600	3,300	2,500	600	500	S
Other physical sciences	S	S	S	S	S	S	S	S	S
Psychology	138,000	84,200	98,500	70,600	74,300	30,400	7,100	8,800	S
Social and related sciences, total	212,400	130,500	159,900	109,900	110,100	52,500	10,500	17,100	3,100
Economics	33,300	21,800	26,100	17,100	15,800	7,500	S	2,800	S
Political science and related sciences	72,900	44,400	59,200	37,800	39,200	19,300	2,500	5,700	S
Sociology and anthropology	66,900	38,400	45,800	35,600	36,000	17,200	3,100	4,400	S
Other social sciences	39,300	25,800	28,700	19,400	19,100	8,500	3,500	4,100	S
Engineering, total	115,100	81,100	81,400	72,700	60,500	28,800	11,300	12,500	2,000
Aerospace and related engineering	3,000	1,800	2,100	1,800	1,400	500	400	200	S
Chemical engineering	11,600	8,600	8,600	8,500	6,000	3,400	700	1,100	S
Civil and architectural engineering	20,700	15,000	15,300	12,700	10,500	4,300	1,600	2,600	S
Electrical, electronic, computer and communications engineering	32,900	22,400	21,700	21,200	18,000	9,400	4,200	4,300	S
Industrial engineering	5,800	3,900	4,400	3,400	3,100	1,300	600	500	S
Mechanical engineering	27,900	20,600	19,700	17,400	14,600	6,400	2,200	2,600	S
Other engineering	13,200	8,700	9,500	7,800	6,900	3,600	1,500	1,200	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Respondents may have multiple sources of support. Therefore, column entries will not add to "Total recipients."
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-6. Number of 1995 and 1996 science and engineering master's degree recipients who received financial support from various sources for those degrees, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Sources of support							
		Earnings from employment	Gifts from parents/ relatives	Scholarships, grants, fellowships	Loans from college, bank, government	Assistantships, work study	Employer assistance	Loans from parents or relatives	Other sources
All science and engineering fields	149,500	79,300	52,600	76,800	46,100	71,400	40,800	9,500	4,500
Major type									
Total science	102,500	57,000	36,900	52,200	37,200	48,200	23,000	6,700	3,700
Total engineering	47,000	22,300	15,700	24,700	8,900	23,100	17,800	2,800	S
Major field									
Computer and information sciences	18,200	8,700	6,800	8,300	2,500	8,100	6,600	1,800	S
Life and related sciences, total	15,300	7,900	5,500	7,400	6,100	7,800	2,800	1,200	S
Agricultural and food sciences	2,500	S	1,000	1,500	S	1,900	S	S	S
Biological sciences	10,500	5,400	4,100	5,000	4,500	5,200	1,600	S	S
Environmental life sciences including forestry sciences	2,400	1,600	S	S	S	S	S	S	S
Mathematical and related sciences	7,900	3,300	1,800	4,300	1,700	4,800	2,200	S	S
Physical and related sciences, total	9,700	3,800	2,600	7,100	2,200	7,000	3,000	S	S
Chemistry, except biochemistry	3,900	1,600	1,100	3,000	1,000	2,700	1,500	S	S
Earth sciences, geology, and oceanography	2,400	1,100	700	1,500	600	1,800	600	S	S
Physics and astronomy	3,000	800	700	2,400	S	2,300	900	S	S
Other physical sciences	S	S	S	S	S	S	S	S	S
Psychology	26,400	16,900	10,900	10,600	14,100	9,000	3,800	S	S
Social and related sciences, total	25,100	16,500	9,300	14,600	10,500	11,500	4,600	1,500	1,300
Economics	4,100	2,000	1,700	2,600	1,400	1,900	S	S	S
Political science and related sciences	8,100	5,400	2,800	4,600	3,600	3,100	1,700	S	S
Sociology and anthropology	4,200	2,600	1,600	3,000	2,200	2,900	S	S	S
Other social sciences	8,700	6,400	3,100	4,400	3,400	3,600	1,700	S	S
Engineering, total	47,000	22,300	15,700	24,700	8,900	23,100	17,800	2,800	S
Aerospace and related engineering	1,500	700	500	900	S	700	500	S	S
Chemical engineering	2,000	900	600	1,400	S	1,100	600	S	S
Civil and architectural engineering	6,500	3,600	2,300	3,700	1,800	3,300	2,200	S	S
Electrical, electronic, computer and communications engineering	16,100	8,000	5,600	7,500	2,300	7,500	6,700	S	S
Industrial engineering	3,200	1,500	1,100	1,700	900	1,500	1,100	S	S
Mechanical engineering	7,200	3,200	2,700	4,200	1,300	4,600	1,600	S	S
Other engineering	10,400	4,400	3,000	5,300	1,900	4,400	5,000	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Respondents may have multiple sources of support. Therefore, column entries will not add to "Total recipients."
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-7. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by amount borrowed for undergraduate education and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Undergraduate loan amount		
		Less than $10,000	$10,000-24,999	$25,000 or more
All science and engineering fields	708,900	429,400	196,300	83,200
Major type				
Total science	593,800	363,700	163,000	67,100
Total engineering	115,100	65,700	33,300	16,200
Major field				
Computer and information sciences	41,000	27,200	10,000	3,900
Life and related sciences, total	139,000	84,400	39,400	15,100
Agricultural and food sciences	14,000	8,700	4,000	S
Biological sciences	115,300	70,000	32,200	13,100
Environmental life sciences including forestry sciences	9,700	5,700	3,200	S
Mathematical and related sciences	26,800	16,300	7,400	3,100
Physical and related sciences, total	36,600	23,500	9,400	3,700
Chemistry, except biochemistry	20,100	13,100	5,100	1,900
Earth sciences, geology, and oceanography	9,200	5,700	2,400	1,100
Physics and astronomy	6,900	4,400	1,800	700
Other physical sciences	S	S	S	S
Psychology	138,000	81,600	39,400	16,900
Social and related sciences, total	212,400	130,700	57,400	24,300
Economics	33,300	21,600	9,400	2,300
Political science and related sciences	72,900	43,200	20,900	8,800
Sociology and anthropology	66,900	40,400	17,900	8,600
Other social sciences	39,300	25,400	9,200	4,700
Engineering, total	115,100	65,700	33,300	16,200
Aerospace and related engineering	3,000	1,800	800	400
Chemical engineering	11,600	6,900	3,200	1,500
Civil and architectural engineering	20,700	12,000	6,100	2,600
Electrical, electronic, computer and communications engineering	32,900	17,600	10,300	5,100
Industrial engineering	5,800	3,400	1,800	600
Mechanical engineering	27,900	16,300	7,700	4,000
Other engineering	13,200	7,800	3,600	1,800

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-8. Number of 1995 and 1996 science and engineering master's degree recipients, by amount borrowed for undergraduate and graduate education and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Undergraduate and graduate loan amount		
		Less than $10,000	$10,000-24,999	$25,000 or more
All science and engineering fields	149,500	93,500	33,000	23,000
Major type				
Total science	102,500	61,000	22,600	18,900
Total engineering	47,000	32,400	10,400	4,100
Major field				
Computer and information sciences	18,200	13,900	2,900	1,400
Life and related sciences, total	15,300	8,600	3,600	3,100
Agricultural and food sciences	2,500	1,700	S	S
Biological sciences	10,500	5,500	2,500	2,500
Environmental life sciences including forestry sciences	2,400	1,400	S	S
Mathematical and related sciences	7,900	5,700	1,300	800
Physical and related sciences, total	9,700	6,300	2,200	1,100
Chemistry, except biochemistry	3,900	2,400	1,000	S
Earth sciences, geology, and oceanography	2,400	1,600	600	S
Physics and astronomy	3,000	2,100	S	S
Other physical sciences	S	S	S	S
Psychology	26,400	12,700	6,200	7,500
Social and related sciences, total	25,100	13,800	6,300	5,000
Economics	4,100	2,400	S	S
Political science and related sciences	8,100	4,300	1,500	2,300
Sociology and anthropology	4,200	2,100	1,100	900
Other social sciences	8,700	5,000	2,500	1,200
Engineering, total	47,000	32,400	10,400	4,100
Aerospace and related engineering	1,500	900	400	S
Chemical engineering	2,000	1,500	S	S
Civil and architectural engineering	6,500	4,100	2,000	S
Electrical, electronic, computer and communications engineering	16,100	11,600	3,200	1,300
Industrial engineering	3,200	2,000	900	S
Mechanical engineering	7,200	5,300	1,300	S
Other engineering	10,400	7,000	2,400	1,100

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-9. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by amount owed for undergraduate loan and major field of degree: April 1997

Major field of 1995-96 bachelor's degree	Total recipients	Amount owed		
		Less than $10,000	$10,000-24,999	$25,000 or more
All science and engineering fields	708,900	512,700	156,700	39,500
Major type				
Total science	593,800	430,400	131,400	32,000
Total engineering	115,100	82,300	25,400	7,500
Major field				
Computer and information sciences	41,000	32,500	6,700	S
Life and related sciences, total	139,000	98,600	32,300	8,100
Agricultural and food sciences	14,000	10,900	2,500	S
Biological sciences	115,300	80,500	27,600	7,100
Environmental life sciences including forestry sciences	9,700	7,100	2,200	S
Mathematical and related sciences	26,800	20,000	5,900	S
Physical and related sciences, total	36,600	26,600	8,000	2,000
Chemistry, except biochemistry	20,100	14,700	4,200	S
Earth sciences, geology, and oceanography	9,200	6,700	2,100	S
Physics and astronomy	6,900	4,900	1,700	S
Other physical sciences	S	S	S	S
Psychology	138,000	99,100	31,800	7,100
Social and related sciences, total	212,400	153,600	46,700	12,100
Economics	33,300	25,100	7,300	S
Political science and related sciences	72,900	51,900	17,000	4,000
Sociology and anthropology	66,900	47,300	14,700	4,900
Other social sciences	39,300	29,400	7,700	S
Engineering, total	115,100	82,300	25,400	7,500
Aerospace and related engineering	3,000	2,100	700	200
Chemical engineering	11,600	8,100	2,800	700
Civil and architectural engineering	20,700	15,200	4,300	S
Electrical, electronic, computer and communications engineering	32,900	23,300	7,600	2,000
Industrial engineering	5,800	4,200	1,400	S
Mechanical engineering	27,900	20,200	5,700	2,000
Other engineering	13,200	9,100	2,800	1,200

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-10. Number of 1995 and 1996 science and engineering master's degree recipients, by amount owed for undergraduate and graduate loans and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Amount owed		
		Less than $10,000	$10,000-24,999	$25,000 or more
All science and engineering fields	149,500	113,700	21,700	14,100
Major type				
Total science	102,500	73,800	16,600	12,100
Total engineering	47,000	39,900	5,100	2,000
Major field				
Computer and information sciences	18,200	16,400	1,300	S
Life and related sciences, total	15,300	10,500	2,600	2,300
Agricultural and food sciences	2,500	2,000	S	S
Biological sciences	10,500	6,900	1,700	1,900
Environmental life sciences including forestry sciences	2,400	1,700	S	S
Mathematical and related sciences	7,900	6,600	S	S
Physical and related sciences, total	9,700	7,600	1,400	700
Chemistry, except biochemistry	3,900	3,000	S	S
Earth sciences, geology, and oceanography	2,400	1,900	S	S
Physics and astronomy	3,000	2,400	S	S
Other physical sciences	S	S	S	S
Psychology	26,400	15,900	5,500	4,900
Social and related sciences, total	25,100	16,900	4,900	3,300
Economics	4,100	2,900	S	S
Political science and related sciences	8,100	4,900	1,500	1,700
Sociology and anthropology	4,200	2,500	1,200	S
Other social sciences	8,700	6,700	1,400	S
Engineering, total	47,000	39,900	5,100	2,000
Aerospace and related engineering	1,500	1,200	S	S
Chemical engineering	2,000	1,800	S	S
Civil and architectural engineering	6,500	5,400	S	S
Electrical, electronic, computer and communications engineering	16,100	14,000	1,500	S
Industrial engineering	3,200	2,700	S	S
Mechanical engineering	7,200	6,000	S	S
Other engineering	10,400	8,900	1,100	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-11. Number of 1995 and 1996 science and engineering bachelor's degree recipients who have taken additional courses since most recent degree and enrollment status on April 15, 1997, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Have taken additional courses since most recent degree[1]	April 15, 1997 status		
			Full-time student	Part-time student	Not student
All science and engineering fields	708,900	340,600	150,300	53,400	505,200
Major type					
Total science	593,800	298,400	135,200	42,700	415,900
Total engineering	115,100	42,200	15,200	10,600	89,300
Major field					
Computer and information sciences	41,000	11,600	S	3,000	35,700
Life and related sciences, total	139,000	82,800	43,000	8,500	87,500
Agricultural and food sciences	14,000	4,800	1,800	S	11,600
Biological sciences	115,300	74,500	40,100	7,500	67,700
Environmental life sciences including forestry sciences	9,700	3,500	S	S	8,200
Mathematical and related sciences	26,800	12,700	5,100	2,400	19,300
Physical and related sciences, total	36,600	23,300	14,000	1,900	20,700
Chemistry, except biochemistry	20,100	13,700	8,600	S	10,600
Earth sciences, geology, and oceanography	9,200	4,600	2,200	600	6,400
Physics and astronomy	6,900	4,600	3,100	S	3,600
Other physical sciences	S	S	S	S	S
Psychology	138,000	75,100	32,800	12,900	92,300
Social and related sciences, total	212,400	92,900	38,000	14,100	160,400
Economics	33,300	11,000	3,500	S	28,400
Political science and related sciences	72,900	33,400	16,300	4,000	52,500
Sociology and anthropology	66,900	29,000	11,100	4,800	51,000
Other social sciences	39,300	19,500	7,000	3,800	28,500
Engineering, total	115,100	42,200	15,200	10,600	89,300
Aerospace and related engineering	3,000	1,300	700	300	2,100
Chemical engineering	11,600	4,600	2,000	1,000	8,700
Civil and architectural engineering	20,700	7,100	2,800	S	16,500
Electrical, electronic, computer and communications engineering	32,900	12,500	3,400	3,900	25,600
Industrial engineering	5,800	1,700	500	400	4,900
Mechanical engineering	27,900	9,500	3,000	2,700	22,300
Other engineering	13,200	5,500	2,800	1,100	9,300

[1]Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-12. Number of 1995 and 1996 science and engineering master's degree recipients who have taken additional courses since most recent degree and enrollment status on April 15, 1997, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Have taken additional courses since most recent degree[1]	April 15, 1997 status		
			Full-time student	Part-time student	Not student
All science and engineering fields	149,500	61,900	30,900	8,200	110,500
Major type					
Total science	102,500	44,900	24,000	5,200	73,300
Total engineering	47,000	17,100	6,800	3,000	37,100
Major field					
Computer and information sciences	18,200	4,300	S	S	16,700
Life and related sciences, total	15,300	7,800	4,900	S	10,000
Agricultural and food sciences	2,500	1,000	S	S	2,000
Biological sciences	10,500	6,100	4,000	S	6,000
Environmental life sciences including forestry sciences	2,400	S	S	S	2,000
Mathematical and related sciences	7,900	3,900	2,200	S	5,300
Physical and related sciences, total	9,700	5,700	3,500	S	5,400
Chemistry, except biochemistry	3,900	2,500	1,700	S	1,900
Earth sciences, geology, and oceanography	2,400	900	S	S	1,800
Physics and astronomy	3,000	2,200	1,300	S	1,400
Other physical sciences	S	S	S	S	S
Psychology	26,400	12,700	5,900	1,900	18,500
Social and related sciences, total	25,100	10,600	6,500	1,100	17,400
Economics	4,100	2,200	1,600	S	2,400
Political science and related sciences	8,100	3,300	2,300	S	5,600
Sociology and anthropology	4,200	2,100	1,500	S	2,300
Other social sciences	8,700	3,000	S	S	7,100
Engineering, total	47,000	17,100	6,800	3,000	37,100
Aerospace and related engineering	1,500	700	400	S	1,000
Chemical engineering	2,000	1,000	700	S	1,200
Civil and architectural engineering	6,500	1,900	S	S	5,600
Electrical, electronic, computer and communications engineering	16,100	6,700	2,400	1,300	12,500
Industrial engineering	3,200	1,000	S	S	2,700
Mechanical engineering	7,200	2,500	1,200	S	5,700
Other engineering	10,400	3,200	1,000	S	8,500

[1]Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-13 Number of 1995 and 1996 science and engineering bachelor's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total number not taking courses since most recent degree[1]	Likelihood will take classes		
		Very likely	Somewhat likely	Very unlikely
All science and engineering fields	368,300	244,100	95,300	29,000
Major type				
Total science	295,400	198,800	74,300	22,400
Total engineering	72,900	45,300	21,000	6,600
Major field				
Computer and information sciences	29,400	16,600	10,000	2,800
Life and related sciences, total	56,200	39,800	11,500	4,800
Agricultural and food sciences	9,100	4,500	3,000	S
Biological sciences	40,800	30,400	7,400	3,100
Environmental life sciences including forestry sciences	6,200	5,000	S	S
Mathematical and related sciences	14,200	9,900	3,100	S
Physical and related sciences, total	13,300	9,000	3,600	700
Chemistry, except biochemistry	6,400	4,100	2,000	S
Earth sciences, geology, and oceanography	4,600	3,100	1,100	S
Physics and astronomy	2,300	1,700	500	S
Other physical sciences	S	S	S	S
Psychology	62,900	45,600	13,200	4,000
Social and related sciences, total	119,500	77,900	32,800	8,800
Economics	22,300	13,700	6,400	2,200
Political science and related sciences	39,500	27,700	8,800	3,000
Sociology and anthropology	37,900	22,400	12,800	S
Other social sciences	19,800	14,100	4,800	S
Engineering, total	72,900	45,300	21,000	6,600
Aerospace and related engineering	1,700	1,200	400	S
Chemical engineering	7,000	4,400	1,700	900
Civil and architectural engineering	13,600	7,400	4,600	1,500
Electrical, electronic, computer and communications engineering	20,400	12,600	6,300	1,600
Industrial engineering	4,100	2,800	1,000	S
Mechanical engineering	18,500	12,000	5,100	S
Other engineering	7,700	4,900	1,900	S

[1]Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-14. Number of 1995 and 1996 science and engineering master's degree recipients who have not taken courses since most recent degree, and likelihood they will take additional courses, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total number not taking courses since most recent degree[1]	Likelihood will take classes		
		Very likely	Somewhat likely	Not likely
All science and engineering fields	87,600	46,200	29,700	11,700
Major type				
Total science	57,700	31,100	19,100	7,500
Total engineering	29,900	15,100	10,600	4,200
Major field				
Computer and information sciences	13,900	6,400	5,400	2,200
Life and related sciences, total	7,600	2,900	3,300	1,300
Agricultural and food sciences	1,600	S	S	S
Biological sciences	4,400	1,800	1,800	S
Environmental life sciences including forestry sciences	1,600	S	S	S
Mathematical and related sciences	4,000	2,400	1,500	S
Physical and related sciences, total	4,000	2,200	1,400	S
Chemistry, except biochemistry	1,500	800	S	S
Earth sciences, geology, and oceanography	1,500	800	S	S
Physics and astronomy	800	S	S	S
Other physical sciences	S	S	S	S
Psychology	13,700	8,400	3,400	1,800
Social and related sciences, total	14,500	8,900	4,100	1,600
Economics	1,900	S	S	S
Political science and related sciences	4,800	2,300	1,700	S
Sociology and anthropology	2,100	1,300	S	S
Other social sciences	5,700	4,200	1,100	S
Engineering, total	29,900	15,100	10,600	4,200
Aerospace and related engineering	700	500	S	S
Chemical engineering	1,000	500	S	S
Civil and architectural engineering	4,600	2,000	1,700	1,000
Electrical, electronic, computer and communications engineering	9,400	4,800	3,100	1,500
Industrial engineering	2,200	1,200	S	S
Mechanical engineering	4,700	2,600	1,500	S
Other engineering	7,300	3,500	3,100	S

[1]Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-15. Number of 1995 and 1996 science and engineering bachelor's degree recipients who took courses between completing most recent degree and April 15, 1997, and type of degree sought, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Took courses between completing most recent degree and week of April 15, 1997[1]					
		Total number	Type of degree sought				
			No specific degree	Ph.D. degree	Prof. degree	MA degree	Other or BA degree
All science and engineering fields	708,900	271,600	37,100	21,000	46,200	134,600	32,700
Major type							
Total science	593,800	236,700	32,300	18,800	44,300	110,300	31,000
Total engineering	115,100	34,800	4,800	2,200	1,900	24,300	1,700
Major field							
Computer and information sciences	41,000	9,100	S	S	S	6,200	S
Life and related sciences, total	139,000	65,800	8,200	7,200	19,800	22,000	8,500
Agricultural and food sciences	14,000	3,700	S	S	S	1,900	S
Biological sciences	115,300	59,600	7,200	6,900	19,300	18,600	7,500
Environmental life sciences including forestry sciences	9,700	2,500	S	S	S	S	S
Mathematical and related sciences	26,800	10,200	S	S	S	5,900	1,300
Physical and related sciences, total	36,600	19,500	1,900	5,200	2,800	7,700	1,900
Chemistry, except biochemistry	20,100	11,100	S	3,600	2,500	3,000	-
Earth sciences, geology, and oceanography	9,200	4,100	700	S	S	2,800	S
Physics and astronomy	6,900	4,100	S	1,300	-	1,900	500
Other physical sciences	S	S	S	S	S	S	S
Psychology	138,000	61,000	8,600	S	3,900	37,900	8,300
Social and related sciences, total	212,400	71,200	11,000	S	17,100	30,600	10,300
Economics	33,300	7,400	1,900	S	S	3,300	S
Political science and related sciences	72,900	25,700	3,200	S	10,300	8,700	2,600
Sociology and anthropology	66,900	23,200	4,400	S	3,800	11,100	3,400
Other social sciences	39,300	14,900	S	S	S	7,500	3,600
Engineering, total	115,100	34,800	4,800	2,200	1,900	24,300	1,700
Aerospace and related engineering	3,000	1,100	S	S	S	900	S
Chemical engineering	11,600	3,800	S	S	S	2,400	S
Civil and architectural engineering	20,700	6,200	S	S	S	3,800	S
Electrical, electronic, computer and communications engineering	32,900	10,600	S	S	S	7,700	S
Industrial engineering	5,800	1,400	S	S	S	1,000	S
Mechanical engineering	27,900	7,200	S	S	S	5,600	S
Other engineering	13,200	4,500	S	S	S	2,900	S

[1]Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-16. Number of 1995 and 1996 science and engineering master's degree recipients who took courses between completing most recent degree and April 15, 1997, and type of degree sought, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Took courses between completing most recent degree and week of April 15, 1997[1]					
		Total number	Type of degree sought				
			No specific degree	Ph.D. degree	Prof. degree	MA degree	Other or BA degree
All science and engineering fields	149,500	53,900	8,000	32,200	3,200	6,200	4,200
Major type							
Total science	102,500	39,300	4,900	24,000	2,800	4,100	3,600
Total engineering	47,000	14,600	3,100	8,300	S	2,200	S
Major field							
Computer and information sciences	18,200	3,000	S	1,400	S	S	S
Life and related sciences, total	15,300	6,900	S	3,400	1,800	S	S
Agricultural and food sciences	2,500	S	S	S	S	S	S
Biological sciences	10,500	5,500	S	2,600	1,700	S	S
Environmental life sciences including forestry sciences	2,400	S	S	S	S	S	S
Mathematical and related sciences	7,900	3,300	S	2,300	S	S	S
Physical and related sciences, total	9,700	5,400	S	3,800	S	S	S
Chemistry, except biochemistry	3,900	2,400	S	1,500	S	S	S
Earth sciences, geology, and oceanography	2,400	800	S	S	S	S	S
Physics and astronomy	3,000	2,100	S	1,700	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	26,400	11,400	S	7,000	S	S	2,100
Social and related sciences, total	25,100	9,200	S	6,100	S	S	S
Economics	4,100	2,000	S	1,400	S	S	S
Political science and related sciences	8,100	2,900	S	1,700	S	S	S
Sociology and anthropology	4,200	2,100	S	1,800	S	S	S
Other social sciences	8,700	2,300	S	S	S	S	S
Engineering, total	47,000	14,600	3,100	8,300	S	2,200	S
Aerospace and related engineering	1,500	700	S	500	S	S	S
Chemical engineering	2,000	900	S	600	S	S	S
Civil and architectural engineering	6,500	1,600	S	S	S	S	S
Electrical, electronic, computer and communications engineering	16,100	6,000	1,400	3,400	S	900	S
Industrial engineering	3,200	S	S	S	S	S	S
Mechanical engineering	7,200	2,000	S	1,400	S	S	S
Other engineering	10,400	2,700	S	1,200	S	S	S

[1] Most recent degree as of the survey reference period, April 1997.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-17. Number of 1995 and 1996 science and engineering bachelor's degree recipients, by future plans for highest degree expected, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Future plans for highest degree expected			
		Bachelor's degree	Master's degree	Doctorate	Professional
All science and engineering fields	708,900	62,200	376,700	190,900	79,200
Major type					
Total science	593,800	49,700	298,200	170,200	75,700
Total engineering	115,100	12,500	78,500	20,700	3,500
Major field					
Computer and information sciences	41,000	6,500	26,500	7,400	S
Life and related sciences, total	139,000	10,300	58,000	37,900	32,800
Agricultural and food sciences	14,000	3,300	6,900	3,100	S
Biological sciences	115,300	6,600	43,800	33,200	31,700
Environmental life sciences including forestry sciences	9,700	S	7,300	S	S
Mathematical and related sciences	26,800	2,000	16,500	7,300	S
Physical and related sciences, total	36,600	2,600	14,200	15,000	4,600
Chemistry, except biochemistry	20,100	1,300	6,200	8,700	3,900
Earth sciences, geology, and oceanography	9,200	1,000	5,300	2,600	S
Physics and astronomy	6,900	S	2,600	3,700	S
Other physical sciences	S	S	S	S	S
Psychology	138,000	8,900	66,100	55,000	8,000
Social and related sciences, total	212,400	19,400	116,800	47,600	28,600
Economics	33,300	3,900	21,200	6,000	2,200
Political science and related sciences	72,900	5,300	33,400	16,200	18,000
Sociology and anthropology	66,900	6,600	40,000	15,500	4,800
Other social sciences	39,300	3,600	22,200	9,800	3,600
Engineering, total	115,100	12,500	78,500	20,700	3,500
Aerospace and related engineering	3,000	200	1,900	800	S
Chemical engineering	11,600	1,500	6,200	3,100	800
Civil and architectural engineering	20,700	3,600	14,100	2,500	S
Electrical, electronic, computer and communications engineering	32,900	2,900	23,300	6,100	S
Industrial engineering	5,800	S	4,500	900	S
Mechanical engineering	27,900	2,600	20,600	4,400	S
Other engineering	13,200	1,500	7,900	2,800	1,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table B-18. Number of 1995 and 1996 science and engineering master's degree recipients, by future plans for highest degree expected, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Future plans for highest degree expected		
		Master's degree	Doctorate	Professional
All science and engineering fields	149,500	61,900	81,000	6,600
Major type				
Total science	102,500	37,400	59,500	5,600
Total engineering	47,000	24,500	21,500	1,000
Major field				
Computer and information sciences	18,200	9,700	8,400	S
Life and related sciences, total	15,300	5,900	7,000	2,400
Agricultural and food sciences	2,500	1,300	1,200	S
Biological sciences	10,500	3,400	4,600	2,400
Environmental life sciences including forestry sciences	2,400	1,200	1,100	S
Mathematical and related sciences	7,900	3,100	4,600	S
Physical and related sciences, total	9,700	3,000	6,300	S
Chemistry, except biochemistry	3,900	1,200	2,400	S
Earth sciences, geology, and oceanography	2,400	1,100	1,200	S
Physics and astronomy	3,000	S	2,500	S
Other physical sciences	S	S	S	S
Psychology	26,400	6,700	19,000	S
Social and related sciences, total	25,100	9,100	14,200	1,800
Economics	4,100	1,400	2,600	S
Political science and related sciences	8,100	2,900	4,200	S
Sociology and anthropology	4,200	1,100	2,800	S
Other social sciences	8,700	3,600	4,600	S
Engineering, total	47,000	24,500	21,500	1,000
Aerospace and related engineering	1,500	500	900	S
Chemical engineering	2,000	800	1,100	S
Civil and architectural engineering	6,500	4,100	2,300	S
Electrical, electronic, computer and communications engineering	16,100	7,800	8,100	S
Industrial engineering	3,200	1,500	1,700	S
Mechanical engineering	7,200	4,100	3,100	S
Other engineering	10,400	5,600	4,300	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-1. Number of 1995 and 1996 science and engineering bachelor's degree recipients who are employed, employed full time and part time counting all jobs, employed full time and part time at principal job only, and number who have a second job, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Employed					
		Total employed	Counting all jobs		Principal job only		Have a second job
			Full time	Part time	Full time	Part time	
All science and engineering fields	708,900	605,900	519,200	86,700	487,700	118,200	90,000
Major type							
Total science	593,800	500,200	421,400	78,800	392,700	107,500	83,000
Total engineering	115,100	105,700	97,800	7,900	95,000	10,700	7,000
Major field							
Computer and information sciences	41,000	39,000	37,100	S	37,000	2,000	3,100
Life and related sciences, total	139,000	105,800	87,600	18,200	81,500	24,300	18,800
Agricultural and food sciences	14,000	13,100	11,800	S	11,000	2,100	2,500
Biological sciences	115,300	83,900	67,900	16,000	63,100	20,800	14,800
Environmental life sciences including forestry sciences	9,700	8,800	7,900	S	7,300	S	S
Mathematical and related sciences	26,800	24,600	20,500	4,100	19,300	5,300	3,900
Physical and related sciences, total	36,600	30,700	24,600	6,100	22,000	8,600	3,400
Chemistry, except biochemistry	20,100	16,000	13,200	2,800	11,800	4,200	S
Earth sciences, geology, and oceanography	9,200	8,300	6,600	1,700	6,100	2,300	1,500
Physics and astronomy	6,900	6,000	4,500	1,500	3,900	2,100	700
Other physical sciences	S	S	S	S	S	S	S
Psychology	138,000	120,100	94,600	25,600	85,900	34,200	25,400
Social and related sciences, total	212,400	180,100	157,100	23,000	147,100	33,000	28,400
Economics	33,300	30,700	27,900	2,800	27,400	3,300	2,300
Political science and related sciences	72,900	59,700	51,500	8,200	49,000	10,700	6,200
Sociology and anthropology	66,900	55,600	48,500	7,000	44,000	11,600	12,000
Other social sciences	39,300	34,200	29,200	5,100	26,800	7,500	7,900
Engineering, total	115,100	105,700	97,800	7,900	95,000	10,700	7,000
Aerospace and related engineering	3,000	2,800	2,400	400	2,200	500	S
Chemical engineering	11,600	10,500	9,800	700	9,400	1,200	S
Civil and architectural engineering	20,700	18,800	17,900	S	17,500	S	1,500
Electrical, electronic, computer and communications engineering	32,900	30,200	28,100	2,000	27,600	2,600	2,100
Industrial engineering	5,800	5,400	5,200	S	5,200	S	S
Mechanical engineering	27,900	26,500	24,200	2,300	23,700	2,800	S
Other engineering	13,200	11,500	10,200	1,200	9,500	2,000	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-2. Number of 1995 and 1996 science and engineering master's degree recipients who are employed, employed full time and part time counting all jobs, employed full time and part time at principal job only, and number who have a second job, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Employed					
		Total employed	Counting all jobs		Principal job only		Have a second job
			Full time	Part time	Full time	Part time	
All science and engineering fields	149,500	135,800	116,000	19,800	107,500	28,300	16,300
Major type							
Total science	102,500	91,600	74,700	16,900	67,900	23,700	13,900
Total engineering	47,000	44,200	41,400	2,800	39,600	4,600	2,400
Major field							
Computer and information sciences	18,200	17,700	16,800	S	16,600	S	1,600
Life and related sciences, total	15,300	12,300	10,300	2,000	9,100	3,200	1,800
Agricultural and food sciences	2,500	2,300	2,000	S	1,800	S	S
Biological sciences	10,500	7,800	6,300	1,500	5,500	2,300	S
Environmental life sciences including forestry sciences	2,400	2,200	2,000	S	1,700	S	S
Mathematical and related sciences	7,900	7,100	5,800	1,300	5,400	1,700	S
Physical and related sciences, total	9,700	8,400	7,100	1,400	6,200	2,200	1,000
Chemistry, except biochemistry	3,900	3,200	2,800	S	2,400	S	S
Earth sciences, geology, and oceanography	2,400	2,300	1,900	S	1,800	S	S
Physics and astronomy	3,000	2,600	2,100	S	1,700	1,000	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	26,400	23,500	17,800	5,700	15,200	8,300	5,200
Social and related sciences, total	25,100	22,700	16,900	5,700	15,500	7,200	3,400
Economics	4,100	3,700	2,300	1,400	2,100	1,600	S
Political science and related sciences	8,100	7,100	5,400	1,600	5,200	1,900	S
Sociology and anthropology	4,200	3,700	2,200	1,500	1,900	1,900	S
Other social sciences	8,700	8,200	7,000	1,200	6,300	1,900	1,400
Engineering, total	47,000	44,200	41,400	2,800	39,600	4,600	2,400
Aerospace and related engineering	1,500	1,400	1,200	S	1,100	S	S
Chemical engineering	2,000	1,700	1,500	S	1,400	S	S
Civil and architectural engineering	6,500	6,300	5,800	S	5,700	S	S
Electrical, electronic, computer and communications engineering	16,100	15,300	14,400	S	13,800	1,400	S
Industrial engineering	3,200	3,100	2,800	S	2,800	S	S
Mechanical engineering	7,200	6,700	6,300	S	5,900	S	S
Other engineering	10,400	9,700	9,300	S	8,900	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-3. Number of 1995 and 1996 science and engineering bachelor's degree recipients who are employed, unemployed, and not in the labor force, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Employed	Unemployed[1]	Not in labor force
All science and engineering fields	708,900	605,900	22,700	80,400
Major type				
Total science	593,800	500,200	18,700	74,900
Total engineering	115,100	105,700	4,000	5,500
Major field				
Computer and information sciences	41,000	39,000	S	S
Life and related sciences, total	139,000	105,800	4,500	28,800
Agricultural and food sciences	14,000	13,100	S	S
Biological sciences	115,300	83,900	4,100	27,300
Environmental life sciences including forestry sciences	9,700	8,800	S	S
Mathematical and related sciences	26,800	24,600	S	1,800
Physical and related sciences, total	36,600	30,700	1,000	4,900
Chemistry, except biochemistry	20,100	16,000	S	3,700
Earth sciences, geology, and oceanography	9,200	8,300	S	S
Physics and astronomy	6,900	6,000	S	700
Other physical sciences	S	S	S	S
Psychology	138,000	120,100	3,000	14,800
Social and related sciences, total	212,400	180,100	8,500	23,800
Economics	33,300	30,700	S	S
Political science and related sciences	72,900	59,700	3,200	10,000
Sociology and anthropology	66,900	55,600	S	8,500
Other social sciences	39,300	34,200	S	3,600
Engineering, total	115,100	105,700	4,000	5,500
Aerospace and related engineering	3,000	2,800	S	S
Chemical engineering	11,600	10,500	S	800
Civil and architectural engineering	20,700	18,800	S	S
Electrical, electronic, computer and communications engineering	32,900	30,200	S	S
Industrial engineering	5,800	5,400	S	S
Mechanical engineering	27,900	26,500	S	S
Other engineering	13,200	11,500	S	1,200

[1]The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-4. Number of 1995 and 1996 science and engineering master's degree recipients who are employed, unemployed, and not in the labor force, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Employed	Unemployed[1]	Not in labor force
All science and engineering fields	149,500	135,800	2,900	10,800
Major type				
Total science	102,500	91,600	2,100	8,900
Total engineering	47,000	44,200	S	2,000
Major field				
Computer and information sciences	18,200	17,700	S	S
Life and related sciences, total	15,300	12,300	S	2,700
Agricultural and food sciences	2,500	2,300	S	S
Biological sciences	10,500	7,800	S	2,400
Environmental life sciences including forestry sciences	2,400	2,200	S	S
Mathematical and related sciences	7,900	7,100	S	S
Physical and related sciences, total	9,700	8,400	S	1,100
Chemistry, except biochemistry	3,900	3,200	S	S
Earth sciences, geology, and oceanography	2,400	2,300	S	S
Physics and astronomy	3,000	2,600	S	S
Other physical sciences	S	S	S	S
Psychology	26,400	23,500	S	2,100
Social and related sciences, total	25,100	22,700	S	2,000
Economics	4,100	3,700	S	S
Political science and related sciences	8,100	7,100	S	S
Sociology and anthropology	4,200	3,700	S	S
Other social sciences	8,700	8,200	S	S
Engineering, total	47,000	44,200	S	2,000
Aerospace and related engineering	1,500	1,400	S	S
Chemical engineering	2,000	1,700	S	S
Civil and architectural engineering	6,500	6,300	S	S
Electrical, electronic, computer and communications engineering	16,100	15,300	S	S
Industrial engineering	3,200	3,100	S	S
Mechanical engineering	7,200	6,700	S	S
Other engineering	10,400	9,700	S	S

[1]The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-5. Number of 1995 and 1996 science and engineering bachelor's degree recipients not studying full time, by employment status and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total number	Not in labor force	In labor force	In labor force	
				Employed	Unemployed[1]
All science and engineering fields	558,600	19,600	539,000	524,400	14,600
Major type					
Total science	458,600	18,400	440,200	428,400	11,900
Total engineering	100,000	1,200	98,700	96,000	2,700
Major field					
Computer and information sciences	38,600	S	38,000	37,400	S
Life and related sciences, total	96,000	4,300	91,700	89,500	2,300
Agricultural and food sciences	12,200	S	12,000	11,800	S
Biological sciences	75,200	3,900	71,300	69,400	S
Environmental life sciences including forestry sciences	8,600	S	8,400	8,200	S
Mathematical and related sciences	21,700	S	21,200	20,900	S
Physical and related sciences, total	22,600	S	22,100	21,400	S
Chemistry, except biochemistry	11,500	S	11,200	10,900	S
Earth sciences, geology, and oceanography	7,000	S	6,800	6,500	S
Physics and astronomy	3,800	S	3,800	3,700	S
Other physical sciences	S	S	S	S	S
Psychology	105,200	5,100	100,100	98,100	S
Social and related sciences, total	174,500	7,400	167,100	161,100	6,000
Economics	29,800	S	29,500	28,600	S
Political science and related sciences	56,600	2,200	54,400	52,500	S
Sociology and anthropology	55,700	S	52,300	49,900	S
Other social sciences	32,300	S	30,900	30,000	S
Engineering, total	100,000	1,200	98,700	96,000	2,700
Aerospace and related engineering	2,300	S	2,300	2,300	S
Chemical engineering	9,600	S	9,300	9,200	S
Civil and architectural engineering	17,800	S	17,600	17,200	S
Electrical, electronic, computer and communications engineering	29,500	S	29,200	28,100	S
Industrial engineering	5,300	S	5,300	5,200	S
Mechanical engineering	24,900	S	24,700	24,000	S
Other engineering	10,400	S	10,300	10,100	S

[1]The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliabil

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-6. Number of 1995 and 1996 science and engineering master's degree recipients not studying full time, by employment status and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total number	Not in labor force	In labor force	In labor force	
				Employed	Unemployed[1]
All science and engineering fields	118,700	3,000	115,700	113,600	2,100
Major type					
Total science	78,500	2,600	75,900	74,400	1,500
Total engineering	40,100	S	39,800	39,200	S
Major field					
Computer and information sciences	17,200	S	16,900	16,700	S
Life and related sciences, total	10,500	S	10,200	9,900	S
Agricultural and food sciences	2,000	S	1,900	1,900	S
Biological sciences	6,400	S	6,300	6,000	S
Environmental life sciences including forestry sciences	2,100	S	2,100	2,000	S
Mathematical and related sciences	5,700	S	5,600	5,500	S
Physical and related sciences, total	6,100	S	5,900	5,800	S
Chemistry, except biochemistry	2,200	S	2,100	2,100	S
Earth sciences, geology, and oceanography	2,000	S	1,900	1,800	S
Physics and astronomy	1,700	S	1,700	1,700	S
Other physical sciences	S	S	S	S	S
Psychology	20,400	S	19,600	19,100	S
Social and related sciences, total	18,600	S	17,700	17,400	S
Economics	2,500	S	2,400	2,300	S
Political science and related sciences	5,800	S	5,600	5,500	S
Sociology and anthropology	2,600	S	2,500	2,500	S
Other social sciences	7,600	S	7,200	7,200	S
Engineering, total	40,100	S	39,800	39,200	S
Aerospace and related engineering	1,000	S	1,000	1,000	S
Chemical engineering	1,300	S	1,300	1,300	S
Civil and architectural engineering	5,800	S	5,800	5,700	S
Electrical, electronic, computer and communications engineering	13,800	S	13,600	13,500	S
Industrial engineering	2,800	S	2,700	2,700	S
Mechanical engineering	6,000	S	6,000	5,900	S
Other engineering	9,400	S	9,400	9,100	S

[1]The unemployed are those who were not working on April 15 and who were seeking work or who were on layoff from a job.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-7. Number of 1995 and 1996 science and engineering bachelor's degree recipients who are not working, and reasons for not working, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Total not working	Reasons for not working					
			Student	Suitable job not available	Family responsibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	708,900	103,000	73,600	18,000	17,100	3,600	38,800	10,500
Major type								
Total science	593,800	93,600	67,700	15,700	16,200	2,700	36,000	9,700
Total engineering	115,100	9,400	5,900	2,300	900	S	2,800	S
Major field								
Computer and information sciences	41,000	S	S	S	S	S	S	S
Life and related sciences, total	139,000	33,200	27,600	3,400	2,500	S	11,100	S
Agricultural and food sciences	14,000	S	S	S	S	S	S	S
Biological sciences	115,300	31,400	26,500	2,900	S	S	10,600	S
Environmental life sciences including forestry sciences	9,700	S	S	S	S	S	S	S
Mathematical and related sciences	26,800	2,300	1,500	S	S	S	S	S
Physical and related sciences, total	36,600	5,900	5,000	900	S	S	2,200	S
Chemistry, except biochemistry	20,100	4,100	3,600	S	S	S	1,700	S
Earth sciences, geology, and oceanography	9,200	900	S	S	S	S	S	S
Physics and astronomy	6,900	900	800	S	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	138,000	17,900	11,800	3,800	5,400	S	7,500	S
Social and related sciences, total	212,400	32,300	20,700	6,600	7,100	S	13,500	4,100
Economics	33,300	2,700	S	S	S	S	S	S
Political science and related sciences	72,900	13,200	9,600	2,100	S	S	4,600	S
Sociology and anthropology	66,900	11,300	6,400	S	3,700	S	5,000	S
Other social sciences	39,300	5,100	3,000	S	S	S	2,700	S
Engineering, total	115,100	9,400	5,900	2,300	900	S	2,800	S
Aerospace and related engineering	3,000	300	S	S	S	S	S	S
Chemical engineering	11,600	1,100	S	S	S	S	S	S
Civil and architectural engineering	20,700	1,900	S	S	S	S	S	S
Electrical, electronic, computer and communications engineering	32,900	2,800	1,400	S	S	S	S	S
Industrial engineering	5,800	S	S	S	S	S	S	S
Mechanical engineering	27,900	1,400	S	S	S	S	S	S
Other engineering	13,200	1,700	1,400	S	S	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and also because respondents can mark more than one reason for not working. These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table C-8. Number of 1995 and 1996 science and engineering master's degree recipients who are not working, and reasons for not working, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Total not working	Reasons for not working					
			Student	Suitable job not available	Family respon-sibilities	On layoff	Not need/ want to work	Other
All science and engineering fields	149,500	13,700	8,900	2,200	2,900	S	5,200	1,500
Major type								
Total science	102,500	10,900	7,000	1,500	2,200	S	4,200	1,400
Total engineering	47,000	2,800	1,900	S	S	S	1,000	S
Major field								
Computer and information sciences	18,200	S	S	S	S	S	S	S
Life and related sciences, total	15,300	3,100	2,500	S	S	S	1,200	S
Agricultural and food sciences	2,500	S	S	S	S	S	S	S
Biological sciences	10,500	2,600	2,300	S	S	S	1,000	S
Environmental life sciences including forestry sciences	2,400	S	S	S	S	S	S	S
Mathematical and related sciences	7,900	S	S	S	S	S	S	S
Physical and related sciences, total	9,700	1,200	1,000	S	S	S	S	S
Chemistry, except biochemistry	3,900	S	S	S	S	S	S	S
Earth sciences, geology, and oceanography	2,400	S	S	S	S	S	S	S
Physics and astronomy	3,000	S	S	S	S	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	26,400	2,900	1,600	S	S	S	S	S
Social and related sciences, total	25,100	2,400	1,300	S	S	S	1,100	S
Economics	4,100	S	S	S	S	S	S	S
Political science and related sciences	8,100	1,000	S	S	S	S	S	S
Sociology and anthropology	4,200	S	S	S	S	S	S	S
Other social sciences	8,700	S	S	S	S	S	S	S
Engineering, total	47,000	2,800	1,900	S	S	S	1,000	S
Aerospace and related engineering	1,500	S	S	S	S	S	S	S
Chemical engineering	2,000	S	S	S	S	S	S	S
Civil and architectural engineering	6,500	S	S	S	S	S	S	S
Electrical, electronic, computer and communications engineering	16,100	900	S	S	S	S	S	S
Industrial engineering	3,200	S	S	S	S	S	S	S
Mechanical engineering	7,200	S	S	S	S	S	S	S
Other engineering	10,400	S	S	S	S	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding and also because respondents can mark more than one reason for not working. These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-1. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by occupation and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total employed	S&E occupation						
		Computer and information scientists	Life and related scientists	Mathematical scientists	Physical scientists	Psychologists	Social and related scientists	Engineers
All science and engineering fields	605,900	49,900	19,400	4,100	17,200	11,500	10,600	74,500
Major type								
Total science	500,200	37,700	19,100	3,600	16,500	11,400	10,600	4 800
Total engineering	105,700	12,200	S	S	S	S	S	69,700
Major field								
Computer and information sciences	39,000	23,300	S	S	S	S	S	S
Life and related sciences, total	105,800	S	16,600	S	3,200	S	S	S
Agricultural and food sciences	13,100	S	2,200	S	S	S	S	S
Biological sciences	83,900	S	13,500	S	2,700	S	S	S
Environmental life sciences including forestry sciences	8,800	S	S	S	S	S	S	S
Mathematical and related sciences	24,600	2,700	S	3,100	S	S	S	S
Physical and related sciences, total	30,700	1,300	1,100	S	12,600	S	S	1,900
Chemistry, except biochemistry	16,000	S	S	S	7,800	S	S	S
Earth sciences, geology, and oceanography	8,300	S	S	S	3,000	S	S	S
Physics and astronomy	6,000	900	S	S	1,800	S	S	1,000
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	120,100	S	S	S	S	10,800	S	S
Social and related sciences, total	180,100	6,000	S	S	S	S	9,100	S
Economics	30,700	S	S	S	S	S	2,500	S
Political science and related sciences	59,700	S	S	S	S	S	2,800	S
Sociology and anthropology	55,600	S	S	S	S	S	S	S
Other social sciences	34,200	S	S	S	S	S	S	S
Engineering, total	105,700	12,200	S	S	S	S	S	69,700
Aerospace and related engineering	2,800	300	S	S	S	S	S	1,500
Chemical engineering	10,500	S	S	S	S	S	S	7,400
Civil and architectural engineering	18,800	S	S	S	S	S	S	13,800
Electrical, electronic, computer and communications engineering	30,200	8,100	S	S	S	S	S	16,500
Industrial engineering	5,400	700	S	S	S	S	S	3,200
Mechanical engineering	26,500	S	S	S	S	S	S	20,600
Other engineering	11,500	1,000	S	S	S	S	S	6,700

See notes and source at end of table, next page.

Table D-1. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by occupation and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Non-S&E occupation			
	Management, sales, and marketing	Teachers, except postsecondary S&E	Health and social services	Technologists and technicians
All science and engineering fields	210,000	84,700	57,700	66,400
Major type				
Total science	196,900	83,200	52,700	63,700
Total engineering	13,100	1,500	5,000	2,600
Major field				
Computer and information sciences	4,200	S	8,700	S
Life and related sciences, total	37,400	11,000	23,100	10,500
Agricultural and food sciences	6,300	S	S	2,000
Biological sciences	27,800	9,200	20,100	7,500
Environmental life sciences including forestry sciences	3,400	S	S	S
Mathematical and related sciences	6,000	7,600	3,100	S
Physical and related sciences, total	6,200	2,200	4,000	1,300
Chemistry, except biochemistry	2,900	S	2,500	S
Earth sciences, geology, and oceanography	2,300	900	900	S
Physics and astronomy	900	S	600	S
Other physical sciences	S	S	S	S
Psychology	50,700	32,500	8,000	14,600
Social and related sciences, total	92,500	29,400	5,800	34,700
Economics	14,800	S	S	8,200
Political science and related sciences	35,000	4,800	S	13,400
Sociology and anthropology	26,100	14,900	S	8,500
Other social sciences	16,600	7,800	S	4,600
Engineering, total	13,100	1,500	5,000	2,600
Aerospace and related engineering	700	S	S	S
Chemical engineering	900	S	S	S
Civil and architectural engineering	2,800	S	S	S
Electrical, electronic, computer and communications engineering	3,000	S	1,700	S
Industrial engineering	1,000	S	S	S
Mechanical engineering	2,800	S	S	S
Other engineering	1,900	S	S	S

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NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-2. Number of employed 1995 and 1996 science and engineering master's degree recipients, by occupation and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total employed	S&E occupation						
		Computer and information scientists	Life and related scientists	Mathematical scientists	Physical scientists	Psychologists	Social and related scientists	Engineers
All science and engineering fields	135,800	23,800	6,600	3,400	6,800	9,600	6,100	33,500
Major type								
Total science	91,600	16,300	6,300	3,200	6,000	9,600	6,100	2,900
Total engineering	44,200	7,500	S	S	S	S	S	30,600
Major field								
Computer and information sciences	17,700	13,400	S	S	S	S	S	S
Life and related sciences, total	12,300	S	5,500	S	S	S	S	S
Agricultural and food sciences	2,300	S	1,500	S	S	S	S	S
Biological sciences	7,800	S	3,600	S	S	S	S	S
Environmental life sciences including forestry sciences	2,200	S	S	S	S	S	S	S
Mathematical and related sciences	7,100	1,100	S	2,600	S	S	S	S
Physical and related sciences, total	8,400	600	S	S	5,000	S	S	S
Chemistry, except biochemistry	3,200	S	S	S	2,200	S	S	S
Earth sciences, geology, and oceanography	2,300	S	S	S	1,500	S	S	S
Physics and astronomy	2,600	S	S	S	1,300	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	23,500	S	S	S	S	9,400	S	S
Social and related sciences, total	22,700	S	S	S	S	S	5,800	S
Economics	3,700	S	S	S	S	S	1,700	S
Political science and related sciences	7,100	S	S	S	S	S	1,800	S
Sociology and anthropology	3,700	S	S	S	S	S	1,600	S
Other social sciences	8,200	S	S	S	S	S	S	S
Engineering, total	44,200	7,500	S	S	S	S	S	30,600
Aerospace and related engineering	1,400	S	S	S	S	S	S	900
Chemical engineering	1,700	S	S	S	S	S	S	1,500
Civil and architectural engineering	6,300	S	S	S	S	S	S	4,800
Electrical, electronic, computer and communications engineering	15,300	4,300	S	S	S	S	S	9,600
Industrial engineering	3,100	S	S	S	S	S	S	1,900
Mechanical engineering	6,700	S	S	S	S	S	S	5,400
Other engineering	9,700	1,500	S	S	S	S	S	6,400

See notes and source at end of table, next page.

Table D-2. Number of employed 1995 and 1996 science and engineering master's degree recipients, by occupation and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Non-S&E occupation			
	Management, sales, and marketing	Teachers, except postsecondary S&E	Health and social services	Technologists and technicians
All science and engineering fields	20,000	14,200	7,900	3,900
Major type				
Total science	17,300	13,900	6,700	3,400
Total engineering	2,700	S	1,200	S
Major field				
Computer and information sciences	S	S	2,300	S
Life and related sciences, total	1,600	1,300	1,600	S
Agricultural and food sciences	S	S	S	S
Biological sciences	S	S	1,300	S
Environmental life sciences including forestry sciences	S	S	S	S
Mathematical and related sciences	1,200	S	S	S
Physical and related sciences, total	700	700	S	S
Chemistry, except biochemistry	S	S	S	S
Earth sciences, geology, and oceanography	S	S	S	S
Physics and astronomy	S	S	S	S
Other physical sciences	S	S	S	S
Psychology	4,200	6,700	S	S
Social and related sciences, total	8,900	4,100	S	1,500
Economics	S	S	S	S
Political science and related sciences	4,000	S	S	S
Sociology and anthropology	S	800	S	S
Other social sciences	3,200	2,600	S	S
Engineering, total	2,700	S	1,200	S
Aerospace and related engineering	S	S	S	S
Chemical engineering	S	S	S	S
Civil and architectural engineering	S	S	S	S
Electrical, electronic, computer and communications engineering	S	S	S	S
Industrial engineering	S	S	S	S
Mechanical engineering	S	S	S	S
Other engineering	S	S	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-3. Number of 1995 and 1996 science and engineering bachelor's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job who are seeking one, by sex and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	708,900	332,900	187,600	145,200	376,100	148,800	72,200	76,600
Major type								
Total science	593,800	254,400	123,400	131,000	339,400	129,500	55,700	73,800
Total engineering	115,100	78,500	64,200	14,200	36,700	19,300	16,400	2,900
Major field								
Computer and information sciences	41,000	29,500	22,100	7,400	11,500	6,000	3,700	2,300
Life and related sciences, total	139,000	51,100	24,000	27,100	87,900	33,300	15,100	18,200
Agricultural and food sciences	14,000	7,700	4,700	3,100	6,200	3,400	2,200	S
Biological sciences	115,300	39,200	17,100	22,200	76,000	26,200	10,900	15,300
Environmental life sciences including forestry sciences	9,700	4,200	2,300	1,900	5,600	3,700	2,100	S
Mathematical and related sciences	26,800	15,000	7,200	7,800	11,800	3,700	1,800	1,900
Physical and related sciences, total	36,600	13,700	8,700	5,000	22,900	6,000	4,200	1,800
Chemistry, except biochemistry	20,100	7,300	4,100	3,200	12,700	2,600	1,600	S
Earth sciences, geology, and oceanography	9,200	3,600	2,400	1,200	5,600	2,300	1,700	600
Physics and astronomy	6,900	2,600	2,100	600	4,300	1,100	900	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	138,000	54,900	16,200	38,600	83,100	33,000	8,600	24,400
Social and related sciences, total	212,400	90,200	45,200	45,000	122,200	47,500	22,200	25,200
Economics	33,300	18,400	12,700	5,800	14,900	4,900	3,300	S
Political science and related sciences	72,900	28,300	14,700	13,600	44,600	15,600	8,500	7,100
Sociology and anthropology	66,900	24,600	10,500	14,100	42,300	18,600	6,500	12,100
Other social sciences	39,300	18,800	7,300	11,500	20,500	8,400	3,900	4,500
Engineering, total	115,100	78,500	64,200	14,200	36,700	19,300	16,400	2,900
Aerospace and related engineering	3,000	1,800	1,500	300	1,200	600	600	S
Chemical engineering	11,600	6,800	4,500	2,400	4,800	2,700	1,800	1,000
Civil and architectural engineering	20,700	14,800	11,800	3,000	5,900	2,800	2,700	S
Electrical, electronic, computer and communications engineering	32,900	22,800	20,100	2,700	10,200	5,600	5,100	S
Industrial engineering	5,800	4,200	3,000	1,200	1,600	700	500	S
Mechanical engineering	27,900	20,600	17,800	2,800	7,400	4,600	4,100	S
Other engineering	13,200	7,600	5,700	1,900	5,600	2,300	1,700	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-4. Number of 1995 and 1996 science and engineering master's degree recipients who have had a career path job since being awarded most recent degree, and number not having career path job who are seeking one, by sex and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total recipients	Number having a career path job			Number not having career path job	Number of those not having a career path job who are seeking a career path job		
		Total	Male	Female		Total	Male	Female
All science and engineering fields	149,500	97,500	59,000	38,500	52,000	15,700	8,500	7,300
Major type								
Total science	102,500	62,900	30,600	32,300	39,600	11,700	4,900	6,800
Total engineering	47,000	34,500	28,300	6,200	12,400	4,000	3,500	S
Major field								
Computer and information sciences	18,200	15,400	11,800	3,600	2,800	S	S	S
Life and related sciences, total	15,300	8,600	4,400	4,100	6,800	1,900	S	1,100
Agricultural and food sciences	2,500	1,300	S	S	1,200	S	S	S
Biological sciences	10,500	5,700	2,600	3,100	4,800	S	S	S
Environmental life sciences including forestry sciences	2,400	1,500	1,100	S	S	S	S	S
Mathematical and related sciences	7,900	4,800	2,900	1,900	3,100	S	S	S
Physical and related sciences, total	9,700	4,200	2,800	1,400	5,500	1,700	1,200	S
Chemistry, except biochemistry	3,900	1,900	1,100	800	2,000	S	S	S
Earth sciences, geology, and oceanography	2,400	1,300	900	S	1,100	600	S	S
Physics and astronomy	3,000	800	700	S	2,200	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	26,400	17,600	3,200	14,400	8,800	2,300	S	1,900
Social and related sciences, total	25,100	12,400	5,500	6,900	12,700	4,400	1,600	2,800
Economics	4,100	1,600	1,100	S	2,600	S	S	S
Political science and related sciences	6,100	3,700	1,900	1,800	4,300	1,900	S	S
Sociology and anthropology	4,200	2,000	S	1,400	2,200	S	S	S
Other social sciences	8,700	5,000	1,800	3,200	3,700	1,300	S	S
Engineering, total	47,000	34,500	28,300	6,200	12,400	4,000	3,500	S
Aerospace and related engineering	1,500	900	800	S	600	S	S	S
Chemical engineering	2,000	1,100	800	S	900	S	S	S
Civil and architectural engineering	6,500	5,100	3,800	1,200	1,400	S	S	S
Electrical, electronic, computer and communications engineering	16,100	12,400	10,700	1,800	3,700	S	S	S
Industrial engineering	3,200	2,300	1,900	S	800	S	S	S
Mechanical engineering	7,200	5,100	4,400	S	2,100	S	S	S
Other engineering	10,400	7,500	6,000	1,500	2,900	1,300	1,200	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-5. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients having job closely, somewhat, and not related to degree, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total employed	Relationship of job to degree		
		Closely related	Somewhat related	Not related
All science and engineering fields	605,900	242,400	178,600	184,900
Major type				
Total science	500,200	184,700	141,900	173,500
Total engineering	105,700	57,700	36,600	11,400
Major field				
Computer and information sciences	39,000	27,800	8,600	2,600
Life and related sciences, total	105,800	40,500	29,400	35,800
Agricultural and food sciences	13,100	6,800	2,700	3,600
Biological sciences	83,900	30,600	24,100	29,100
Environmental life sciences including forestry sciences	8,800	3,100	2,600	3,100
Mathematical and related sciences	24,600	13,100	6,400	5,000
Physical and related sciences, total	30,700	16,400	7,100	7,200
Chemistry, except biochemistry	16,000	9,800	2,900	3,300
Earth sciences, geology, and oceanography	8,300	3,900	2,000	2,400
Physics and astronomy	6,000	2,500	2,000	1,500
Other physical sciences	S	S	S	S
Psychology	120,100	40,200	36,500	43,400
Social and related sciences, total	180,100	46,800	54,000	79,400
Economics	30,700	9,500	12,100	9,100
Political science and related sciences	59,700	11,500	15,300	32,800
Sociology and anthropology	55,600	15,300	17,400	22,800
Other social sciences	34,200	10,400	9,200	14,600
Engineering, total	105,700	57,700	36,600	11,400
Aerospace and related engineering	2,800	1,300	900	600
Chemical engineering	10,500	4,700	4,100	1,700
Civil and architectural engineering	18,800	12,600	4,900	S
Electrical, electronic, computer and communications engineering	30,200	17,200	10,400	2,600
Industrial engineering	5,400	2,300	2,300	800
Mechanical engineering	26,500	14,200	10,200	2,200
Other engineering	11,500	5,400	3,800	2,300

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-6. Number of employed 1995 and 1996 science and engineering master's degree recipients having job closely, somewhat, and not related to degree, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total employed	Relationship of job to degree		
		Closely related	Somewhat related	Not related
All science and engineering fields	135,800	89,200	34,200	12,400
Major type				
Total science	91,600	60,900	21,600	9,200
Total engineering	44,200	28,400	12,600	3,200
Major field				
Computer and information sciences	17,700	14,100	3,100	S
Life and related sciences, total	12,300	8,000	3,200	1,100
Agricultural and food sciences	2,300	1,800	S	S
Biological sciences	7,800	5,000	2,000	S
Environmental life sciences including forestry sciences	2,200	1,200	S	S
Mathematical and related sciences	7,100	4,400	2,000	S
Physical and related sciences, total	8,400	5,700	1,900	800
Chemistry, except biochemistry	3,200	2,500	S	S
Earth sciences, geology, and oceanography	2,300	1,400	600	S
Physics and astronomy	2,600	1,700	700	S
Other physical sciences	S	S	S	S
Psychology	23,500	16,300	4,900	2,300
Social and related sciences, total	22,700	12,400	6,500	3,800
Economics	3,700	1,900	1,100	S
Political science and related sciences	7,100	3,400	2,400	1,300
Sociology and anthropology	3,700	2,200	S	S
Other social sciences	8,200	4,800	2,200	S
Engineering, total	44,200	28,400	12,600	3,200
Aerospace and related engineering	1,400	800	S	S
Chemical engineering	1,700	1,100	500	S
Civil and architectural engineering	6,300	4,400	1,500	S
Electrical, electronic, computer and communications engineering	15,300	10,600	4,100	S
Industrial engineering	3,100	1,700	1,100	S
Mechanical engineering	6,700	3,800	2,200	S
Other engineering	9,700	6,000	2,800	1,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-7. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1997

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	605,900	319,700	286,200	468,500	42,400	41,300	48,400	5,400
Occupation type								
Total scientists	112,700	69,100	43,600	86,900	6,000	6,700	12,300	S
Total engineers	74,500	61,600	12,900	57,900	3,700	4,700	7,800	S
Total other occupations	418,700	189,000	229,700	323,600	32,700	30,000	28,300	4,100
Occupation[1]								
Computer and information scientists	49,900	38,100	11,800	37,200	3,300	2,100	7,400	S
Life and related scientists	19,400	9,200	10,200	16,100	S	1,200	S	S
Mathematical and related scientists	4,100	2,300	1,800	2,700	S	S	S	S
Physical scientists	17,200	10,500	6,700	14,800	700	S	1,200	S
Psychologists	11,500	4,200	7,300	8,500	S	S	S	S
Social and related scientists	10,600	4,800	5,900	7,500	S	S	S	S
Engineers	74,500	61,600	12,900	57,900	3,700	4,700	7,800	S
Managers and related occupations	39,800	22,300	17,600	29,400	2,800	3,200	4,200	S
Health and related occupations	25,000	8,200	16,800	18,000	1,800	1,800	S	S
Educators other than S&E postsecondary	50,200	16,500	33,800	39,600	3,900	3,600	2,600	S
Social services and related occupations	34,400	9,900	24,500	23,800	5,100	2,800	S	S
Technicians including computer programmers	32,600	21,900	10,700	25,200	1,700	1,500	4,200	S
Sales and marketing occupations	66,400	36,900	29,500	53,400	4,500	4,700	3,100	S
Other occupations	170,100	73,300	96,800	134,300	12,800	12,300	9,000	1,800

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-8. Number of employed 1995 and 1996 science and engineering master's degree recipients, by sex, race/ethnicity, and occupation: April 1997

Occupation	Total employed	Sex		Race/ethnicity				
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native
All employed science and engineering graduates	135,800	81,900	53,900	95,100	6,300	6,000	27,600	700
Occupation type								
Total scientists	56,300	33,800	22,500	37,000	2,400	2,100	14,700	S
Total engineers	33,500	27,900	5,600	22,500	1,100	1,100	8,600	S
Total other occupations	46,000	20,200	25,800	35,600	2,800	2,700	4,400	S
Occupation[1]								
Computer and information scientists	23,800	18,100	5,600	11,200	700	600	11,200	S
Life and related scientists	6,600	3,500	3,100	5,300	S	S	S	S
Mathematical and related scientists	3,400	1,900	1,500	2,400	S	S	S	S
Physical scientists	6,800	5,200	1,600	5,100	S	S	1,100	S
Psychologists	9,600	1,800	7,800	8,400	S	S	S	S
Social and related scientists	6,100	3,300	2,900	4,600	S	S	S	S
Engineers	33,500	27,900	5,600	22,500	1,100	1,100	8,600	S
Managers and related occupations	8,600	4,700	3,900	6,200	600	700	S	S
Health and related occupations	2,500	S	1,800	2,100	S	S	S	S
Educators other than S&E postsecondary	8,400	2,800	5,700	7,100	500	S	S	S
Social services and related occupations	5,800	1,400	4,400	4,600	S	S	S	S
Technicians including computer programmers	5,400	3,500	1,900	3,100	S	S	1,700	S
Sales and marketing occupations	3,900	2,100	1,800	3,200	S	S	S	
Other occupations	11,400	5,100	6,400	9,400	700	S	S	S

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-9. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by age and occupation: April 1997

Occupation	Total employed	Age			
		Less than 25	25–29	30–34	35 or more
All employed science and engineering graduates	605,900	342,400	186,300	32,700	44,500
Occupation type					
Total scientists	112,700	62,500	33,600	7,100	9,500
Total engineers	74,500	37,000	26,600	6,400	4,600
Total other occupations	418,700	243,000	126,100	19,200	30,400
Occupation[1]					
Computer and information scientists	49,900	22,800	17,400	4,200	5,500
Life and related scientists	19,400	11,000	5,500	S	S
Mathematical and related scientists	4,100	2,300	1,500	S	S
Physical scientists	17,200	10,500	4,900	1,000	S
Psychologists	11,500	7,500	2,800	S	S
Social and related scientists	10,600	8,200	S	S	S
Engineers	74,500	37,000	26,600	6,400	4,600
Managers and related occupations	39,800	22,200	12,000	1,900	3,700
Health and related occupations	25,000	15,200	6,900	S	S
Educators other than S&E postsecondary	50,200	30,400	14,200	2,500	3,200
Social services and related occupations	34,400	17,700	9,400	S	5,500
Technicians including computer programmers	32,600	17,700	10,500	2,100	2,300
Sales and marketing occupations	66,400	39,200	22,700	2,600	S
Other occupations	170,100	100,500	50,400	7,300	12,000

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.

These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-10. Number of employed 1995 and 1996 science and engineering master's degree recipients, by age and occupation: April 1997

Occupation	Total employed	Age			
		Less than 25	25–29	30–34	35 or more
All employed science and engineering graduates	135,800	5,500	63,300	34,300	32,700
Occupation type					
Total scientists	56,300	2,300	28,100	14,800	11,100
Total engineers	33,500	1,600	16,000	9,500	6,300
Total other occupations	46,000	1,600	19,200	10,000	15,300
Occupation[1]					
Computer and information scientists	23,800	1,200	11,200	7,200	4,200
Life and related scientists	6,600	S	3,400	1,600	1,300
Mathematical and related scientists	3,400	S	1,600	1,200	S
Physical scientists	6,800	S	3,500	1,800	1,200
Psychologists	9,600	S	4,900	1,600	2,800
Social and related scientists	6,100	S	3,500	1,400	S
Engineers	33,500	1,600	16,000	9,500	6,300
Managers and related occupations	8,600	S	3,500	2,200	2,500
Health and related occupations	2,500	S	S	S	S
Educators other than S&E postsecondary	8,400	S	3,300	1,300	3,400
Social services and related occupations	5,800	S	2,500	S	2,300
Technicians including computer programmers	5,400	S	2,500	1,100	1,600
Sales and marketing occupations	3,900	S	1,200	S	S
Other occupations	11,400	S	5,000	2,600	3,400

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-11. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by primary work activity and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total employed	Primary work activity				
		Research and development	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	605,900	106,500	83,700	229,200	70,800	115,700
Major type						
Total science	500,200	63,700	63,100	198,500	67,400	107,400
Total engineering	105,700	42,700	20,600	30,700	3,300	8,300
Major field						
Computer and information sciences	39,000	5,000	25,700	6,200	S	S
Life and related sciences, total	105,800	24,700	4,900	37,400	15,100	23,600
Agricultural and food sciences	13,100	2,100	S	6,000	S	3,300
Biological sciences	83,900	20,600	3,800	27,900	12,800	18,800
Environmental life sciences including forestry sciences	8,800	2,100	S	3,500	S	S
Mathematical and related sciences	24,600	1,800	6,000	5,600	8,800	2,300
Physical and related sciences, total	30,700	10,500	2,700	7,300	5,800	4,500
Chemistry, except biochemistry	16,000	6,600	S	4,000	2,800	2,400
Earth sciences, geology, and oceanography	8,300	2,000	900	2,500	1,500	1,400
Physics and astronomy	6,000	1,800	1,400	700	1,300	700
Other physical sciences	S	S	S	S	S	S
Psychology	120,100	9,700	7,000	47,200	19,500	36,700
Social and related sciences, total	180,100	11,900	16,800	95,000	17,800	38,700
Economics	30,700	2,600	4,000	18,800	S	3,100
Political science and related sciences	59,700	4,400	5,100	33,800	3,000	13,500
Sociology and anthropology	55,600	S	4,100	26,700	6,700	15,700
Other social sciences	34,200	2,600	3,500	15,800	5,900	6,400
Engineering, total	105,700	42,700	20,600	30,700	3,300	8,300
Aerospace and related engineering	2,800	1,200	500	500	S	400
Chemical engineering	10,500	4,500	1,300	3,400	S	1,100
Civil and architectural engineering	18,800	6,900	2,500	7,100	S	2,100
Electrical, electronic, computer and communications engineering	30,200	10,600	10,400	6,500	S	1,700
Industrial engineering	5,400	1,200	1,300	2,400	S	500
Mechanical engineering	26,500	14,200	2,600	7,400	S	S
Other engineering	11,500	4,200	2,100	3,400	S	1,300

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-12. Number of employed 1995 and 1996 science and engineering master's degree recipients, by primary work activity and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total employed	Primary work activity				
		Research and development	Computer applications	Management, sales, administration	Teaching	Other
All science and engineering fields	135,800	40,400	28,800	26,500	17,000	23,100
Major type						
Total science	91,600	19,100	18,700	18,300	15,400	20,200
Total engineering	44,200	21,300	10,100	8,300	1,600	2,900
Major field						
Computer and information sciences	17,700	2,700	12,400	1,700	S	S
Life and related sciences, total	12,300	5,000	S	2,200	2,000	2,300
Agricultural and food sciences	2,300	1,100	S	S	S	S
Biological sciences	7,800	3,300	S	S	1,800	1,400
Environmental life sciences including forestry sciences	2,200	S	S	1,000	S	S
Mathematical and related sciences	7,100	1,600	1,700	1,100	2,300	S
Physical and related sciences, total	8,400	4,500	900	1,000	1,500	S
Chemistry, except biochemistry	3,200	2,100	S	S	800	S
Earth sciences, geology, and oceanography	2,300	1,000	S	S	S	S
Physics and astronomy	2,600	1,400	S	S	S	S
Other physical sciences	S	S	S	S	S	S
Psychology	23,500	1,800	S	5,100	3,700	12,100
Social and related sciences, total	22,700	3,600	2,000	7,100	5,100	4,800
Economics	3,700	S	S	1,100	S	S
Political science and related sciences	7,100	1,100	S	3,400	S	1,300
Sociology and anthropology	3,700	S	S	S	1,000	1,100
Other social sciences	8,200	S	S	2,000	2,100	2,100
Engineering, total	44,200	21,300	10,100	8,300	1,600	2,900
Aerospace and related engineering	1,400	600	400	S	S	S
Chemical engineering	1,700	1,200	S	S	S	S
Civil and architectural engineering	6,300	2,500	1,200	1,400	S	1,100
Electrical, electronic, computer and communications engineering	15,300	7,900	5,000	1,900	S	S
Industrial engineering	3,100	900	S	1,000	S	S
Mechanical engineering	6,700	4,000	S	1,000	S	S
Other engineering	9,700	4,300	1,800	2,500	S	S

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-13. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by primary work activity and occupation: April 1997

Occupation	Total employed	Primary work activity				
		Research and development	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	605,900	106,500	83,700	229,200	70,800	115,700
Occupation type						
Total scientists	112,700	37,600	39,300	12,900	14,500	8,400
Total engineers	74,500	40,400	8,600	18,800	2,000	4,800
Total other occupations	418,700	28,500	35,800	197,600	54,300	102,500
Occupation[1]						
Computer and information scientists	49,900	6,200	36,500	5,600	S	S
Life and related scientists	19,400	14,100	S	S	3,000	S
Mathematical and related scientists	4,100	S	S	S	2,000	S
Physical scientists	17,200	8,700	600	2,500	4,600	S
Psychologists	11,500	S	S	S	S	4,700
Social and related scientists	10,600	4,800	S	2,000	S	S
Engineers	74,500	40,400	8,600	18,800	2,000	4,800
Managers and related occupations	39,800	S	2,300	32,100	S	3,100
Health and related occupations	25,000	2,700	S	3,600	S	17,000
Educators other than S&E postsecondary	50,200	S	S	4,100	44,100	S
Social services and related occupations	34,400	S	S	8,100	S	22,700
Technicians including computer programmers	32,600	9,900	15,000	4,700	S	2,800
Sales and marketing occupations	66,400	S	S	60,200	S	2,400
Other occupations	170,100	10,300	14,700	84,900	6,300	54,000

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-14. Number of employed 1995 and 1996 science and engineering master's degree recipients, by primary work activity and occupation: April 1997

Occupation	Total employed	Primary work activity				
		Research and development	Computer applications	Management, sales, administration	Teaching	Other
All employed science and engineering graduates	135,800	40,400	28,800	26,500	17,000	23,100
Occupation type						
Total scientists	56,300	16,100	19,000	4,700	7,700	8,800
Total engineers	33,500	20,400	3,800	5,700	1,100	2,500
Total other occupations	46,000	4,000	6,000	16,100	8,200	11,800
Occupation[1]						
Computer and information scientists	23,800	3,400	17,700	1,900	S	S
Life and related scientists	6,600	4,400	S	S	S	S
Mathematical and related scientists	3,400	1,200	S	S	1,400	S
Physical scientists	6,800	4,200	S	S	1,000	S
Psychologists	9,600	S	S	S	S	6,900
Social and related scientists	6,100	1,800	S	S	2,600	S
Engineers	33,500	20,400	3,800	5,700	1,100	2,500
Managers and related occupations	8,600	S	S	6,600	S	S
Health and related occupations	2,500	S	S	S	S	1,900
Educators other than S&E postsecondary	8,400	S	S	S	7,700	S
Social services and related occupations	5,800	S	S	S	S	4,200
Technicians including computer programmers	5,400	1,300	3,400	S	S	S
Sales and marketing occupations	3,900	S	S	2,400	S	S
Other occupations	11,400	1,000	S	5,300	S	3,900

[1]Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
Primary work activity is defined as activity in which respondent worked most hours on job in typical work week.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-15. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients whose work is supported by Federal Government, and agency giving support, by major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total employed	Number whose work is supported by Federal Government	Agency supporting work								
			Department of Defense	Department of Education	Department of Energy	EPA	HHS	NASA	NIH	NSF	Other
All science and engineering fields	605,900	74,700	17,300	11,400	3,600	3,600	14,900	2,700	7,500	6,100	20,200
Major type											
Total science	500,200	58,600	8,500	10,800	2,000	2,700	14,600	1,500	7,200	4,600	16,600
Total engineering	105,700	16,200	8,700	S	1,600	S	S	1,300	S	1,500	3,700
Major field											
Computer and information sciences	39,000	3,900	2,500	S	S	S	S	S	S	S	S
Life and related sciences, total	105,800	12,900	S	S	S	S	2,200	S	4,200	S	3,200
Mathematical and related sciences	24,600	2,400	S	S	S	S	S	S	S	S	S
Physical and related sciences, total	30,700	5,500	1,100	S	S	S	S	S	S	1,600	1,000
Psychology	120,100	16,400	S	4,500	S	S	7,300	S	S	S	3,800
Social and related sciences, total	180,100	17,500	S	3,700	S	S	4,700	S	S	S	7,700
Engineering, total	105,700	16,200	8,700	S	1,600	S	S	1,300	S	1,500	3,700

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability
EPA = Environmental Protection Agency
HHS = Department of Health and Human Services
NASA = National Aeronautics and Space Administration
NIH = National Institutes of Health
NSF = National Science Foundation

NOTES: Details may not add to totals because of rounding.
Respondent's work may be supported by more than one federal agency. Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-16. Number of employed 1995 and 1996 science and engineering master's degree recipients whose work is supported by Federal Government, and agency giving support, by major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total employed	Number whose work is supported by Federal Government	Agency supporting work								
			Department of Defense	Department of Education	Department of Energy	EPA	HHS	NASA	NIH	NSF	Other
All science and engineering fields	135,800	26,200	7,400	2,800	2,400	1,400	2,800	1,600	2,200	3,100	6,200
Major type											
Total science	91,600	17,700	2,900	2,600	1,200	S	2,600	S	2,100	2,300	5,000
Total engineering	44,200	8,600	4,500	S	1,200	S	S	700	S	S	1,200
Major field											
Computer and information sciences	17,700	2,300	1,100	S	S	S	S	S	S	S	S
Life and related sciences, total	12,300	3,600	S	S	S	S	S	S	S	S	1,100
Mathematical and related sciences	7,100	S	S	S	S	S	S	S	S	S	S
Physical and related sciences, total	8,400	2,300	S	S	S	S	S	S	S	1,000	S
Psychology	23,500	4,700	S	S	S	S	1,400	S	S	S	S
Social and related sciences, total	22,700	4,000	S	S	S	S	S	S	S	S	2,000
Engineering, total	44,200	8,600	4,500	S	1,200	S	S	700	S	S	1,200

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability
EPA = Environmental Protection Agency
HHS = Department of Health and Human Services
NASA = National Aeronautics and Space Administration
NIH = National Institutes of Health
NSF = National Science Foundation

NOTES: Details may not add to totals because of rounding.
Respondent's work may be supported by more than one federal agency.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-17. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by occupation and work-related training: April 1997

Occupation	Total employed	Work-related training[1]			
		Management training	Training in occupational field	General professional training	Other training
All employed science and engineering graduates	605,900	94,700	331,400	87,000	35,200
Occupation type					
Total scientists	112,700	11,900	62,500	12,900	5,200
Total engineers	74,500	14,500	45,800	15,400	5,000
Total other occupations	418,700	68,300	223,100	58,700	25,000
Occupation[2]					
Computer and information scientists	49,900	6,700	32,700	7,200	1,700
Life and related scientists	19,400	S	7,900	S	S
Mathematical and related scientists	4,100	S	1,600	S	S
Physical scientists	17,200	1,100	7,900	1,800	1,300
Psychologists	11,500	S	6,800	S	S
Social and related scientists	10,600	S	5,600	S	S
Engineers	74,500	14,500	45,800	15,400	5,000
Managers and related occupations	39,800	14,100	24,900	9,400	S
Health and related occupations	25,000	3,100	14,400	2,200	S
Educators other than S&E postsecondary	50,200	5,300	31,400	6,700	2,700
Social services and related occupation	34,400	7,300	26,700	6,600	4,300
Technicians including computer programmers	32,600	2,300	15,800	3,300	1,900
Sales and marketing occupations	66,400	13,800	37,700	13,500	2,900
Other occupations	170,100	22,100	72,000	16,900	9,800

[1] Respondents may report two or more types of worker-related trainng.

[2] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-18. Number of employed 1995 and 1996 science and engineering master's degree recipients, by occupation and work-related training: April 1997

Occupation	Total employed	Work-related training[1]			
		Management training	Training in occupational field	General professional training	Other training
All employed science and engineering graduates	135,800	20,300	80,000	19,900	6,200
Occupation type					
Total scientists	56,300	5,600	32,500	6,100	2,100
Total engineers	33,500	5,600	20,300	6,700	1,800
Total other occupations	46,000	9,100	27,200	7,100	2,300
Occupation[2]					
Computer and information scientists	23,800	3,200	14,600	3,200	S
Life and related scientists	6,600	S	3,400	S	S
Mathematical and related scientists	3,400	S	1,500	S	S
Physical scientists	6,800	S	2,900	S	S
Psychologists	9,600	S	7,500	S	S
Social and related scientists	6,100	S	2,500	S	S
Engineers	33,500	5,600	20,300	6,700	1,800
Managers and related occupations	8,600	3,000	5,300	1,800	S
Health and related occupations	2,500	S	1,600	S	S
Educators other than S&E postsecondary	8,400	S	5,400	S	S
Social services and related occupation	5,800	1,700	4,900	S	S
Technicians including computer programmers	5,400	S	2,400	S	S
Sales and marketing occupations	3,900	S	2,300	S	S
Other occupations	11,400	1,900	5,400	1,700	S

[1] Respondents my report two or more types of work-related training.

[2] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-19. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by sector of employment and work-related training: April 1997

Sector of employment	Total employed	Work-related training[1]			
		Management training	Training in occupational field	General professional training	Other training
Total	605,900	94,700	331,400	87,000	35,200
Private industry and business (non-educational)					
Private, for-profit company[2]	367,200	61,700	196,300	55,000	18,100
Nonprofit organization	39,000	5,600	26,700	5,100	4,400
Self-employed	12,600	S	4,600	S	S
Educational institution					
4-year college and university[3]	72,900	5,800	29,200	6,600	3,100
Other educational[4]	55,400	6,000	34,700	6,900	3,800
Government					
Federal Government	21,600	6,500	13,500	5,000	1,600
State or local government	37,300	7,800	26,400	7,300	4,200

[1] Respondents may report two or more types of work-related training.

[2] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[3] Includes university-affiliated medical schools or research organizations.

[4] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-20. Number of employed 1995 and 1996 science and engineering master's degree recipients, by sector of employment and work-related training: April 1997

Sector of employment	Total employed	Work-related training[1]			
		Management training	Training in occupational field	General professional training	Other training
Total	135,800	20,300	80,000	19,900	6,200
Private industry and business (non-educational)					
Private, for-profit company[2]	69,500	12,100	42,400	12,500	3,000
Nonprofit organization	8,400	1,700	6,200	1,400	S
Self-employed	2,100	S	1,300	S	S
Educational institution					
4-year college and university[3]	28,100	1,000	9,600	1,700	1,000
Other educational[4]	12,300	1,600	9,200	1,500	S
Government					
Federal Government	8,400	2,100	5,900	1,400	S
State or local government	7,000	1,500	5,400	1,100	S

[1] Respondents may report two or more types of work-related training.

[2] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[3] Includes university-affiliated medical schools or research organizations.

[4] Includes elementary, middle, secondary,and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-21. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by occupation and job satisfaction: April 1997

Occupation	Total employed	Job satisfaction		
		Very satisfied	Somewhat satisfied	Very or somewhat dissatisfied
All employed science and engineering graduates	605,900	240,800	255,800	109,300
Occupation type				
Total scientists	112,700	56,300	43,200	13,100
Total engineers	74,500	35,400	30,500	8,600
Total other occupations	418,700	149,100	182,100	87,500
Occupation[1]				
Computer and information scientists	49,900	25,600	18,100	6,200
Life and related scientists	19,400	10,000	6,700	2,600
Mathematical and related scientists	4,100	1,700	2,000	S
Physical scientists	17,200	8,400	7,400	1,400
Psychologists	11,500	5,100	4,700	S
Social and related scientists	10,600	5,400	4,300	S
Engineers	74,500	35,400	30,500	8,600
Managers and related occupations	39,800	16,400	17,200	6,300
Health and related occupations	25,000	8,300	12,000	4,700
Educators other than S&E postsecondary	50,200	22,800	21,100	6,400
Social services and related occupations	34,400	11,500	16,200	6,700
Technicians including computer programmers	32,600	11,800	14,500	6,300
Sales and marketing occupations	66,400	24,300	27,500	14,600
Other occupations	170,100	53,900	73,700	42,500

[1] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table D-22. Number of employed 1995 and 1996 science and engineering master's degree recipients, by occupation and job satisfaction: April 1997

Occupation	Total employed	Job satisfaction		
		Very satisfied	Somewhat satisfied	Very or somewhat dissatisfied
All employed science and engineering graduates	135,800	61,800	55,900	18,100
Occupation type				
Total scientists	56,300	27,100	23,100	6,200
Total engineers	33,500	16,300	13,500	3,700
Total other occupations	46,000	18,400	19,400	8,200
Occupation[1]				
Computer and information scientists	23,800	10,800	10,600	2,400
Life and related scientists	6,600	3,300	2,200	1,100
Mathematical and related scientists	3,400	1,800	1,500	S
Physical scientists	6,800	3,300	2,900	S
Psychologists	9,600	4,700	3,800	S
Social and related scientists	6,100	3,200	2,100	S
Engineers	33,500	16,300	13,500	3,700
Managers and related occupations	8,600	3,800	3,600	1,200
Health and related occupations	2,500	1,200	S	S
Educators other than S&E postsecondary	8,400	4,100	2,800	1,500
Social services and related occupations	5,800	2,400	2,500	S
Technicians including computer programmers	5,400	2,100	2,600	S
Sales and marketing occupations	3,900	S	1,900	S
Other occupations	11,400	3,800	4,900	2,700

[1] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-1. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by sector of employment and occupation: April 1997

Occupation	Total employed	Sector of employment						
		Private industry and business (non-educational)			Educational institution		Government	
		Private, for-profit company[1]	Nonprofit organization	Self-employed	4-year college and university[2]	Other educational[3]	Federal Government	State or local government
All employed science and engineering graduates	605,900	367,200	39,000	12,600	72,900	55,400	21,600	37,300
Occupation type								
Total scientists	112,700	61,500	5,300	S	35,500	1,700	3,800	3,500
Total engineers	74,500	60,900	S	S	8,100	S	2,800	2,000
Total other occupations	418,700	244,800	33,200	11,300	29,300	53,400	15,000	31,700
Occupation[4]								
Computer and information scientists	49,900	42,000	S	S	3,400	S	1,900	S
Life and related scientists	19,400	6,300	S	S	11,000	S	S	S
Mathematical and related scientists	4,100	S	S	S	2,700	S	S	S
Physical scientists	17,200	7,800	S	S	8,200	S	S	S
Psychologists	11,500	S	3,300	S	5,100	S	S	S
Social and related scientists	10,600	2,400	S	S	5,200	S	S	S
Engineers	74,500	60,900	S	S	8,100	S	2,800	2,000
Managers and related occupations	39,800	31,700	S	S	S	S	1,100	1,500
Health and related occupations	25,000	12,100	4,100	S	3,700	S	S	S
Educators other than S&E postsecondary	50,200	2,700	S	S	3,800	40,200	S	S
Social services and related occupations	34,400	5,400	12,800	S	2,400	2,600	S	10,500
Technicians including computer programmers	32,600	25,600	S	S	3,500	S	S	S
Sales and marketing occupations	66,400	60,000	S	2,300	S	S	S	S
Other occupations	170,100	107,300	11,000	7,000	13,300	7,300	10,300	14,000

[1] Persons reporting they were self-employed, but in an incorporated business are classified as "private, for-profit."

[2] Includes university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

[4] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-2. Number of employed 1995 and 1996 science and engineering master's degree recipients, by sector of employment and occupation: April 1997

Occupation	Total employed	Sector of employment						
		Private industry and business (non-educational)			Educational institution		Government	
		Private, for-profit company[1]	Nonprofit organization	Self-employed	4-year college and university[2]	Other educational[3]	Federal Government	State or local government
All employed science and engineering graduates	135,800	69,500	8,400	2,100	28,100	12,300	8,400	7,000
Occupation type								
Total scientists	56,300	26,800	2,700	S	17,700	3,400	2,800	2,200
Total engineers	33,500	23,500	S	S	5,200	S	2,500	1,700
Total other occupations	46,000	19,100	5,300	1,300	5,200	8,800	3,100	3,100
Occupation[4]								
Computer and information scientists	23,800	19,700	S	S	2,500	S	S	S
Life and related scientists	6,600	2,000	S	S	3,500	S	S	S
Mathematical and related scientists	3,400	S	S	S	2,000	S	S	S
Physical scientists	6,800	2,400	S	S	3,400	S	S	S
Psychologists	9,600	1,600	1,900	S	2,000	2,600	S	S
Social and related scientists	6,100	S	S	S	4,300	S	S	S
Engineers	33,500	23,500	S	S	5,200	S	2,500	1,700
Managers and related occupations	8,600	4,800	S	S	S	S	1,200	S
Health and related occupations	2,500	S	S	S	S	S	S	S
Educators other than S&E postsecondary	8,400	S	S	S	1,100	6,100	S	S
Social services and related occupations	5,800	S	2,100	S	S	1,600	S	1,200
Technicians including computer programmers	5,400	3,600	S	S	S	S	S	S
Sales and marketing occupations	3,900	3,200	S	S	S	S	S	S
Other occupations	11,400	5,700	S	S	1,500	S	1,500	S

[1] Persons reporting they were self-employed, but in an incorporated business are classified as "private, for-profit."

[2] Includes university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

[4] Science and engineering categories include postsecondary educators. For more details see technical notes.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-3. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by sector of employment and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total employed	Sector of employment						
		Private industry and business (non-educational)			Educational institution		Government	
		Private, for-profit company[1]	Nonprofit organization	Self-employed	4-year college and university[2]	Other educational[3]	Federal Government	State or local government
All science and engineering fields	605,900	367,200	39,000	12,600	72,900	55,400	21,600	37,300
Major type								
Total science	500,200	284,000	38,000	12,000	62,900	53,800	14,900	34,600
Total engineering	105,700	83,100	S	S	10,000	1,600	6,700	2,700
Major field								
Computer and information sciences	39,000	31,900	S	S	2,400	S	S	S
Life and related sciences, total	105,800	60,000	5,200	3,400	18,600	11,300	3,200	4,200
Agricultural and food sciences	13,100	8,000	S	S	S	S	S	S
Biological sciences	83,900	46,400	4,100	S	16,600	9,700	2,500	2,800
Environmental life sciences including forestry sciences	8,800	5,600	S	S	S	S	S	S
Mathematical and related sciences	24,600	11,500	S	S	3,700	7,500	S	S
Physical and related sciences, total	30,700	16,100	900	S	8,800	2,000	1,800	900
Chemistry, except biochemistry	16,000	8,900	S	S	4,700	S	S	S
Earth sciences, geology, and oceanography	8,300	4,500	S	S	1,700	800	700	S
Physics and astronomy	6,000	2,600	S	S	2,500	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	120,100	58,000	16,400	S	13,400	16,800	S	11,500
Social and related sciences, total	180,100	106,500	13,800	5,300	16,000	15,800	6,300	16,500
Economics	30,700	24,500	S	S	S	S	S	S
Political science and related sciences	59,700	39,200	4,100	S	5,000	2,500	2,500	5,000
Sociology and anthropology	55,600	26,600	5,600	S	6,100	6,300	S	7,600
Other social sciences	34,200	16,300	2,800	S	3,200	5,800	S	3,400
Engineering, total	105,700	83,100	S	S	10,000	1,600	6,700	2,700
Aerospace and related engineering	2,800	1,400	S	S	500	S	700	S
Chemical engineering	10,500	8,500	S	S	1,400	S	S	S
Civil and architectural engineering	18,800	14,200	S	S	S	S	S	2,100
Electrical, electronic, computer and communications engineering	30,200	24,000	S	S	2,800	S	2,200	S
Industrial engineering	5,400	4,800	S	S	S	S	S	S
Mechanical engineering	26,500	21,900	S	S	2,300	S	S	S
Other engineering	11,500	8,300	S	S	1,500	S	900	S

[1] Persons reporting they were self-employed, but in an incorporated business are classified as "private, for-profit."

[2] Includes university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-4. Number of employed 1995 and 1996 science and engineering master's degree recipients, by sector of employment and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total employed	Sector of employment						
		Private industry and business (non-educational)			Educational institution		Government	
		Private, for-profit company[1]	Nonprofit organization	Self-employed	4-year college and university[2]	Other educational[3]	Federal Government	State or local government
All science and engineering fields	135,800	69,500	8,400	2,100	28,100	12,300	8,400	7,000
Major type								
Total science	91,600	38,100	7,800	1,700	22,100	12,200	4,600	5,100
Total engineering	44,200	31,400	S	S	6,000	S	3,900	1,900
Major field								
Computer and information sciences	17,700	14,300	S	S	2,000	S	S	S
Life and related sciences, total	12,300	4,600	S	S	4,500	1,400	S	S
Agricultural and food sciences	2,300	S	S	S	S	S	S	S
Biological sciences	7,800	2,500	S	S	3,100	1,200	S	S
Environmental life sciences including forestry sciences	2,200	1,300	S	S	S	S	S	S
Mathematical and related sciences	7,100	3,000	S	S	2,000	1,100	S	S
Physical and related sciences, total	8,400	3,300	S	S	3,600	700	S	S
Chemistry, except biochemistry	3,200	1,400	S	S	1,400	S	S	S
Earth sciences, geology, and oceanography	2,300	1,100	S	S	S	S	S	S
Physics and astronomy	2,600	800	S	S	1,600	S	S	S
Other physical sciences	S	S	S	S	S	S	S	S
Psychology	23,500	6,400	4,500	S	3,200	6,000	S	2,300
Social and related sciences, total	22,700	6,500	2,500	S	6,900	2,600	2,100	1,600
Economics	3,700	1,300	S	S	1,500	S	S	S
Political science and related sciences	7,100	2,600	S	S	1,500	S	1,200	S
Sociology and anthropology	3,700	S	S	S	1,700	S	S	S
Other social sciences	8,200	2,100	S	S	2,100	1,400	S	S
Engineering, total	44,200	31,400	S	S	6,000	S	3,900	1,900
Aerospace and related engineering	1,400	600	S	S	S	S	400	S
Chemical engineering	1,700	1,100	S	S	600	S	S	S
Civil and architectural engineering	6,300	4,000	S	S	S	S	S	1,200
Electrical, electronic, computer and communications engineering	15,300	11,700	S	S	2,000	S	1,100	S
Industrial engineering	3,100	2,300	S	S	S	S	S	S
Mechanical engineering	6,700	4,900	S	S	1,000	S	S	S
Other engineering	9,700	6,900	S	S	S	S	S	S

[1] Persons reporting they were self-employed, but in an incorporated business are classified as "private, for-profit."

[2] Includes 4-year colleges and universities, and university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, or 2-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-5. Number of employed 1995 and 1996 science and engineering bachelor's degree recipients, by sector of employment and employment benefits: April 1997

Sector of employment	Total employed	Employment benefits			
		Health insurance at least partially paid by employer	Pension or retirement plan to which employer contributes	Profit-sharing plan	Paid vacation, sick, or personal days
Total	605,900	455,400	359,800	189,800	452,100
Private industry and business (non-educational)					
Private, for-profit company[1]	367,200	301,600	240,800	164,300	303,900
Nonprofit organization	39,000	30,100	21,700	6,100	32,000
Self-employed	12,600	S	S	S	S
Educational institution					
4-year college or university[2]	72,900	37,300	20,000	4,400	28,700
Other educational[3]	55,400	36,600	32,000	5,800	36,600
Government					
Federal Government	21,600	19,900	16,600	2,400	20,000
State or local government	37,300	30,100	28,800	6,800	30,900

[1] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[2] Includes university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table E-6. Number of employed 1995 and 1996 science and engineering master's degree recipients, by sector of employment and employment benefits: April 1997

Sector of employment	Total employed	Employment benefits			
		Health insurance at least partially paid by employer	Pension or retirement plan to which employer contributes	Profit-sharing plan	Paid vacation, sick, or personal days
Total	135,800	112,900	89,400	41,300	107,900
Private industry and business (non-educational)					
Private, for profit company[1]	69,500	63,300	53,000	37,100	63,800
Nonprofit organizations	8,400	6,600	5,100	S	6,600
Self-employed	2,100	S	S	S	S
Educational institution					
4-year college or university[2]	28,100	18,100	8,500	S	12,200
Other educational[3]	12,300	10,700	9,500	1,200	11,000
Government					
Federal Government	8,400	8,300	7,700	S	8,300
State or local government	7,000	6,000	5,600	S	6,100

[1] Persons reporting they were self-employed, but in an incorporated business, are classified as "private, for-profit."

[2] Includes university-affiliated medical schools or research organizations.

[3] Includes elementary, middle, secondary, and less than 4-year colleges or other educational institutions; excludes 4-year colleges and universities.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTES: Details may not add to totals because of rounding.
These estimates on recent college graduates are obtained from a sample survey of individuals whose most recent bachelor's or master's degree is in a science or engineering field and may differ from degree counts presented in other SRS publications.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-1. Median salary of full-time employed 1995 and 1996 bachelor's degree recipients, by sex, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E bachelor's degree	Total	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All science and engineering fields	$27,500	$30,500	$24,000	$27,000	$25,700	$25,000	$33,000
Major type							
Total science	25,000	27,800	23,000	25,000	24,000	24,000	28,800
Total engineering	38,000	38,000	38,000	38,000	37,000	36,000	40,000
Major field							
Computer and information sciences	38,000	38,000	36,400	38,000	35,000	34,000	40,000
Life and related sciences, total	23,500	25,000	22,000	23,000	22,900	25,000	25,000
Agricultural and food sciences	23,500	24,600	23,000	23,000	S	S	S
Biological sciences	23,000	25,000	22,000	23,000	22,900	24,600	25,000
Environmental life sciences including forestry sciences	25,000	26,000	23,000	25,000	S	S	S
Mathematical and related sciences	28,000	30,000	28,000	28,000	30,000	S	S
Physical and related sciences, total	27,000	29,000	23,000	27,000	23,000	22,000	27,700
Chemistry, except biochemistry	27,000	30,000	23,000	27,000	22,800	S	S
Earth sciences, geology, and oceanography	25,000	26,000	22,000	25,000	S	S	S
Physics and astronomy	31,200	32,000	28,000	30,000	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	22,000	22,500	22,000	22,000	23,000	23,000	S
Social and related sciences, total	25,000	27,000	24,000	25,000	23,000	25,000	28,000
Economics	30,000	31,000	29,000	30,000	25,000	28,000	39,300
Political science and related sciences	26,000	27,500	25,000	26,000	24,000	27,000	26,000
Sociology and anthropology	21,500	24,000	21,000	21,000	21,500	22,000	S
Other social sciences	25,000	25,000	25,000	25,000	24,000	25,100	S
Engineering, total	38,000	38,000	38,000	38,000	37,000	36,000	40,000
Aerospace and related engineering	35,500	35,000	37,000	36,000	S	35,000	S
Chemical engineering	42,000	42,000	41,000	42,000	40,900	37,500	43,000
Civil and architectural engineering	32,000	32,000	33,000	33,000	31,000	30,000	S
Electrical, electronic, computer and communications engineering	40,000	40,000	40,000	40,000	35,200	41,000	42,000
Industrial engineering	37,000	37,000	37,200	37,000	37,500	35,000	S
Mechanical engineering	39,000	38,500	39,000	39,000	38,000	36,000	40,000
Other engineering	35,700	36,000	35,000	35,000	S	35,000	40,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.
Data on American Indians/Alaskan Natives are included in the total, but are not shown separately due to insufficient sample size.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-2. Median salary of full-time employed 1995 and 1996 master's degree recipients, by sex, race/ethnicity, and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All science and engineering fields	$42,000	$47,000	$35,000	$40,000	$40,000	$39,000	$47,000
Major type							
Total science	37,400	42,600	33,000	35,000	35,000	32,000	47,000
Total engineering	48,500	49,000	47,500	50,000	48,000	46,000	47,500
Major field							
Computer and information sciences	50,000	50,000	48,000	50,000	42,000	S	50,000
Life and related sciences, total	32,000	32,000	32,300	32,000	S	S	S
Agricultural and food sciences	31,000	S	S	31,000	S	S	S
Biological sciences	32,000	31,000	32,000	31,000	S	S	S
Environmental life sciences including forestry sciences	36,000	32,000	S	36,000	S	S	S
Mathematical and related sciences	40,000	42,000	35,500	40,000	S	S	S
Physical and related sciences, total	35,000	37,500	31,000	32,000	S	S	44,000
Chemistry, except biochemistry	31,500	39,500	28,000	31,000	S	S	S
Earth sciences, geology, and oceanography	32,000	34,000	S	31,500	S	S	S
Physics and astronomy	41,000	40,000	S	37,500	S	S	S
Other physical sciences	S	S	S	S	S	S	S
Psychology	30,000	29,000	30,000	30,000	30,000	32,000	S
Social and related sciences, total	35,000	37,000	33,000	34,000	36,000	32,000	40,000
Economics	40,000	42,000	S	S	S	S	S
Political science and related sciences	35,000	37,000	34,000	35,000	S	S	S
Sociology and anthropology	28,000	S	25,000	28,000	S	S	S
Other social sciences	36,000	36,000	35,000	35,000	36,000	S	S
Engineering, total	48,500	49,000	47,500	50,000	48,000	46,000	47,500
Aerospace and related engineering	48,000	49,000	S	49,500	S	S	S
Chemical engineering	49,000	49,000	49,000	52,000	S	S	S
Civil and architectural engineering	40,000	42,000	35,000	40,000	S	S	37,500
Electrical, electronic, computer and communications engineering	54,000	53,400	55,000	55,000	S	S	54,000
Industrial engineering	49,000	49,000	S	50,000	S	S	S
Mechanical engineering	47,000	46,000	S	47,200	S	S	46,000
Other engineering	47,500	47,700	46,000	49,000	S	S	44,000

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.
Data on American Indians/Alaskan Natives are included in the total, but are not shown separately due to insufficient sample size.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-3. Median salary of full-time employed 1995 and 1996 bachelor's degree recipients, by sex, race/ethnicity, and occupation: April 1997

Occupation	Total	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All employed science and engineering graduates	$27,500	$30,500	$24,000	$27,000	$25,700	$25,000	$33,000
Occupation type							
Total scientists	34,000	35,500	30,000	33,000	34,000	26,000	40,000
Total engineers	39,000	38,500	39,500	39,000	38,500	38,000	40,000
Total other occupations	24,400	26,000	23,000	24,000	23,400	24,000	26,000
Occupation[1]							
Computer and information scientists	40,000	40,000	38,000	39,000	35,000	37,200	43,500
Life and related scientists	24,000	25,000	23,000	24,000	S	S	S
Mathematical and related scientists	33,000	S	S	S	S	S	S
Physical scientists	28,600	29,000	28,000	28,500	S	S	S
Psychologists	19,900	S	20,000	S	S	S	S
Social and related scientists	25,000	24,000	25,000	23,000	S	S	S
Engineers	39,000	38,500	39,500	39,000	38,500	38,000	40,000
Managers and related occupations	32,000	35,000	29,500	32,000	28,000	30,000	35,000
Health and related occupations[2]	22,500	25,000	22,000	22,000	24,000	S	S
Educators other than S&E postsecondary	22,500	24,000	22,000	22,000	25,000	24,000	S
Social services and related occupations	21,600	22,000	21,500	21,800	21,500	24,000	S
Technicians including computer programmers	29,000	30,000	26,500	28,000	29,000	27,000	33,000
Sales and marketing occupations	27,000	28,200	26,000	27,700	23,000	26,400	30,000
Other occupations	22,000	24,000	21,000	22,000	21,600	22,000	25,000

[1] Science and engineering categories include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.
Data on American Indians/Alaskan Natives are included in the total, but are not shown separately due to insufficient sample size.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-4. Median salary of full-time employed 1995 and 1996 master's degree recipients, by sex, race/ethnicity, and occupation: April 1997

Occupation	Total	Sex		Race/ethnicity			
		Male	Female	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian or Pacific Islander
All employed science and engineering graduates	$42,000	$47,000	$35,000	$40,000	$40,000	$39,000	$47,000
Occupation type							
Total scientists	43,000	47,000	35,000	39,000	40,000	34,000	48,000
Total engineers	48,000	48,300	47,000	49,000	48,000	46,000	47,000
Total other occupations	35,000	40,000	32,000	35,000	35,000	37,000	40,000
Occupation[1]							
Computer and information scientists	50,000	50,000	48,000	50,000	48,000	54,000	50,000
Life and related scientists	31,000	32,000	30,000	32,000	S	S	S
Mathematical and related scientists	35,000	S	S	S	S	S	S
Physical scientists	35,000	35,000	32,000	35,000	S	S	S
Psychologists	32,000	S	32,000	32,000	S	S	S
Social and related scientists	35,900	S	S	35,000	S	S	S
Engineers	48,000	48,300	47,000	49,000	48,000	46,000	47,000
Managers and related occupations	50,000	52,000	43,000	50,000	47,000	50,000	S
Health and related occupations[2]	35,500	S	S	36,000	S	S	S
Educators other than S&E postsecondary	32,000	34,000	29,000	31,000	S	S	S
Social services and related occupations	28,500	27,000	29,000	27,000	S	S	S
Technicians including computer programmers	38,000	39,000	38,000	35,500	S	S	45,000
Sales and marketing occupations	30,000	30,000	S	30,000	S	S	S
Other occupations	35,000	42,000	30,000	34,000	35,000	S	S

[1] Science and engineering categories include postsecondary educators. For more details see technical notes.

[2] Health-related majors are not included in sample. Salaries are not representative of those received by health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only. Data on American Indians/Alaskan Natives are included in the total, but are not shown separately due to insufficient sample size.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-5. Median salary of full-time employed 1995 and 1996 bachelor's degree recipients, by broad sector of employment and major field of degree: April 1997

Major field of 1995-95 S&E bachelor's degree	Total	Broad sector of employment		
		Private industry and business[1]	Educational institution	Government
All science and engineering fields	$27,500	$30,000	$22,000	$25,000
Major type				
Total science	25,000	26,000	22,000	24,700
Total engineering	38,000	39,000	31,000	32,000
Major field				
Computer and information sciences	38,000	38,000	S	31,500
Life and related sciences, total	23,500	24,700	21,000	23,000
Agricultural and food sciences	23,500	25,000	S	S
Biological sciences	23,000	24,000	21,000	24,000
Environmental life sciences including forestry sciences	25,000	25,000	S	S
Mathematical and related sciences	28,000	32,800	25,000	S
Physical and related sciences, total	27,000	27,600	25,000	27,000
Chemistry, except biochemistry	27,000	27,000	S	S
Earth sciences, geology, and oceanography	25,000	25,000	25,000	27,000
Physics and astronomy	31,200	35,000	26,500	S
Other physical sciences	S	S	S	S
Psychology	22,000	22,000	22,000	24,500
Social and related sciences, total	25,000	26,000	22,000	24,000
Economics	30,000	30,000	S	S
Political science and related sciences	26,000	27,000	23,200	25,000
Sociology and anthropology	21,500	22,500	18,500	22,000
Other social sciences	25,000	25,000	25,000	23,000
Engineering, total	38,000	39,000	31,000	32,000
Aerospace and related engineering	35,500	37,500	S	27,000
Chemical engineering	42,000	42,000	S	S
Civil and architectural engineering	32,000	33,000	S	31,000
Electrical, electronic, computer and communications engineering	40,000	41,000	S	35,000
Industrial engineering	37,000	38,000	S	S
Mechanical engineering	39,000	39,000	S	30,000
Other engineering	35,700	37,000	S	28,000

[1]Nonprofit (excluding educational institutions) are included with private industry and business.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only. Data on American Indians/Alaskan Natives are included in the total but are not shown separately.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-6. Median salary of full-time employed 1995 and 1996 master's degree recipients, by broad sector of employment and major field of degree: April 1997

Major field of 1995-96 S&E master's degree	Total	Broad sector of employment		
		Private industry and business[1]	Educational institution	Government
All science and engineering fields	$42,000	$45,000	$32,500	$42,000
Major type				
Total science	37,400	40,000	32,000	37,400
Total engineering	48,500	49,000	40,000	48,000
Major field				
Computer and information sciences	50,000	50,000	36,500	S
Life and related sciences, total	32,000	35,000	30,000	32,000
Agricultural and food sciences	31,000	S	S	S
Biological sciences	32,000	34,000	30,000	S
Environmental life sciences including forestry sciences	36,000	36,000	S	S
Mathematical and related sciences	40,000	43,000	33,000	S
Physical and related sciences, total	35,000	40,000	28,000	40,000
Chemistry, except biochemistry	31,500	39,500	S	S
Earth sciences, geology, and oceanography	32,000	32,000	S	S
Physics and astronomy	41,000	45,400	S	S
Other physical sciences	S	S	S	S
Psychology	30,000	30,000	32,500	29,000
Social and related sciences, total	35,000	35,000	32,000	40,000
Economics	40,000	S	S	S
Political science and related sciences	35,000	35,000	S	40,000
Sociology and anthropology	28,000	S	S	S
Other social sciences	36,000	35,000	34,000	42,000
Engineering, total	48,500	49,000	40,000	48,000
Aerospace and related engineering	48,000	45,000	S	S
Chemical engineering	49,000	49,000	S	S
Civil and architectural engineering	40,000	38,000	S	47,000
Electrical, electronic, computer and communications engineering	54,000	55,000	S	50,000
Industrial engineering	49,000	50,000	S	S
Mechanical engineering	47,000	47,000	S	S
Other engineering	47,500	47,500	S	45,000

[1]Nonprofit (excluding educational institutions) are included with private industry and business.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-7. Median salary of full-time employed 1995 and 1996 bachelor's degree recipients, by broad sector of employment and occupation: April 1997

Occupation	Total	Broad sector of employment		
		Private industry and business[1]	Educational institutions	Government
All employed science and engineering graduates	$27,500	$30,000	$22,000	$25,000
Occupation type				
Total scientists	34,000	35,500	22,000	29,000
Total engineers	39,000	39,000	S	35,000
Total other occupations	24,400	25,000	22,000	24,700
Occupation[2]				
Computer and information scientists	40,000	40,000	38,500	32,000
Life and related scientists	24,000	27,000	21,000	S
Mathematical and related scientists	33,000	S	S	S
Physical scientists	28,600	28,000	S	S
Psychologists	19,900	19,000	S	S
Social and related scientists	25,000	30,000	S	S
Engineers	39,000	39,000	S	35,000
Managers and related occupations	32,000	33,000	26,000	31,000
Health and related occupations[3]	22,500	22,000	28,000	23,000
Educators other than S&E postsecondary	22,500	20,800	23,000	S
Social services and related occupations	21,600	20,000	23,000	22,000
Technicians including computer programmers	29,000	30,000	20,800	26,000
Sales and marketing occupations	27,000	27,000	S	S
Other occupations	22,000	22,000	19,900	25,000

[1] Nonprofit (excluding educational institutions) are included with private industry and business.

[2] Science and engineering categories include postsecondary educators. For more details see technical notes.

[3] Health-related majors are not included in sample. Salaries are not representative of those received by individuals in health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

Table F-8. Median salary of full-time employed 1995 and 1996 master's degree recipients, by broad sector of employment and occupation: April 1997

Occupation	Total	Broad sector of employment		
		Private industry and business[1]	Educational institutions	Government
All employed science and engineering graduates	$42,000	$45,000	$32,500	$42,000
Occupation type				
Total scientists	43,000	47,000	32,000	36,000
Total engineers	48,000	48,000	47,000	48,000
Total other occupations	35,000	35,500	32,000	40,000
Occupation[2]				
Computer and information scientists	50,000	50,000	37,000	54,000
Life and related scientists	31,000	35,000	28,000	S
Mathematical and related scientists	35,000	S	S	S
Physical scientists	35,000	36,000	S	S
Psychologists	32,000	30,000	33,000	S
Social and related scientists	35,900	S	S	S
Engineers	48,000	48,000	47,000	48,000
Managers and related occupations	50,000	50,000	S	50,000
Health and related occupations[3]	35,500	S	S	S
Educators other than S&E postsecondary	32,000	S	34,000	S
Social services and related occupations	28,500	26,000	30,000	S
Technicians including computer programmers	38,000	40,000	S	S
Sales and marketing occupations	30,000	30,000	S	S
Other occupations	35,000	30,000	S	45,600

[1] Nonprofit (excluding educational institutions) are included with private industry and business.

[2] Science and engineering categories include postsecondary educators. For more details see technical notes.

[3] Health-related majors are not included in sample. Salaries are not representative of those received by individuals in health-related occupations.

KEY: S = Data with weighted values less than 100 or unweighted sample sizes less than 20 are suppressed for reasons of data reliability.

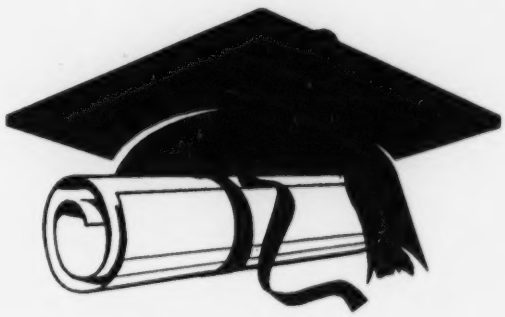
NOTE: Salary data for the following groups are not included in the table: self-employed persons, full-time students, and people whose principal job was less than 35 hours per week. Salary data are for principal job only.

SOURCE: National Science Foundation/Division of Science Resources Studies, National Survey of Recent College Graduates, 1997

SECTION C.
SURVEY INSTRUMENT

OMB No.: 3145-0077

Approval Expires: 2/28/00



1997 National Survey of Recent College Graduates

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide will be treated as confidential and used only for research or statistical purposes by the survey sponsors, their contractors, and collaborating researchers for the purpose of analyzing data and preparing scientific reports and articles. Any information publicly released (such as statistical summaries) will be in a form that does not personally identify you. Your response is voluntary and failure to provide some or all of the requested information will not in any way adversely affect you. Actual time to complete the questionnaire may vary depending on your circumstances. On the average, it will take about 25 minutes to complete the questionnaire. If you have any comments on the time required for this survey, please send them to Gail McHenry, Division of Administrative Services, National Science Foundation, 4201 Wilson Boulevard, Arlington, VA 22230. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB number for this project is 3145-0077.

Conducted by:

Westat
Rockville, MD

for the
National Science Foundation
Arlington, VA

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INSTRUCTIONS

Thank you for taking the time to complete this important questionnaire. Directions for filling it out are provided with each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.

In order to get comparable data, we will be asking you to refer to the week of April 15, 1997 (i.e., April 13-April 19, 1997) when answering most questions.

Follow all "SKIP" instructions after marking a box. If no "SKIP" instruction is provided, you should continue to the next question.

Either a pen or pencil may be used.

When answering questions that require marking a box, please use an [X].

- If you need to change an answer, please make sure that your old answer is either completely erased or clearly crossed out.
- You may notice that some question numbers are not consecutive. This was done to maintain consistency with previous survey cycles. Please answer questions in the order they are printed except when following a "SKIP" instruction.

Thanks again for your help. We really appreciate it.

PART A - Education

A1. In what year did you receive your high school diploma or high school equivalency certificate?

YEAR

19 ☐☐ OR ☐ Did not finish high school

A2. In what state or foreign country did you last attend high school?

State: _____ OR

Foreign Country: _____

A3. Have you ever taken courses at a community college?

1 ☐ Yes

2 ☐ No ☐ ***SKIP to A4X***

A4. *(IF YES)* For which of the following reasons have you taken courses at a community college?

Mark (X) Yes or No for each	YES	NO
b. As part of a high school advanced placement (AP) program	1 ☐	2 ☐
c. To prepare for college/increase chances of being accepted into college	1 ☐	2 ☐
d. To complete an associate's degree	1 ☐	2 ☐
e. To complete credits toward a bachelor's degree	1 ☐	2 ☐
f. To gain further skills or knowledge in your academic or occupational field	1 ☐	2 ☐
g. To change your academic or occupational field	1 ☐	2 ☐
h. To increase opportunities for promotion, advancement, or higher salary	1 ☐	2 ☐
i. For leisure or personal interest	1 ☐	2 ☐
j. For financial reasons (e.g., 4-year college too expensive, needed the money for other priorities)	1 ☐	2 ☐
k. Other - *Specify* ☐	1 ☐	2 ☐

A4X. Do you have a 2-year associate's degree?

1 ☐ Yes

2 ☐ No

A5. When you first entered college to begin working on a bachelor's degree, in what field of study did you want to major?

☐ ☐ MARK (X) THIS BOX IF YOU WERE UNDECIDED AND THEN SKIP TO A7

MAJOR FIELD OF STUDY ☐

A6. Using the EDUCATION CODES (LIST A: pp. 18-19) choose the code that best describes your first intended major.

CODE ☐☐☐ NOTE: Education codes range from 601 to 995

A7. Using a 4-point scale, what was your overall undergraduate grade point average (GPA)?

IF YOU HAVE MORE THAN ONE BACHELOR'S DEGREE: *Give your overall grade point average for your first bachelor's degree.*

Mark (X) ONLY one

1 ☐ 3.75 - 4.00 GPA (Mostly A's)

2 ☐ 3.25 - 3.74 GPA (About half A's/half B's)

3 ☐ 2.75 - 3.24 GPA (Mostly B's)

4 ☐ 2.25 - 2.74 GPA (About half B's/half C's)

5 ☐ 1.75 - 2.24 GPA (Mostly C's)

6 ☐ 1.25 - 1.74 GPA (About half C's/half D's)

7 ☐ Less than 1.25 (Mostly D's or below)

8 ☐ Have not taken courses for which grades were given

A10. How many college or university degrees do you have at the bachelor's level or higher?

NUMBER ☐

A10a. In what month and year did you first enroll in a course offered by a college or other postsecondary institution for which you received credit towards your first bachelor's degree? This may be at the institution that granted your degree, or at another institution.

Month ☐☐ 19 Year ☐☐

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A11. Starting with your most recent college or university degree, please provide the following information for each degree you have at the bachelor's level or higher.

If more than 3 relevant degrees, complete the grid for your two most recent degrees and your first bachelor's degree.

MOST RECENT DEGREE	2ND MOST RECENT DEGREE	1ST BACHELOR'S DEGREE (If not previously reported)
a. From which college/university and department did you receive this degree? (College/University Name) (Department) (City/Town) (State/Foreign Country)	**a. From which college/university and department did you receive this degree?** (College/University Name) (Department) (City/Town) (State/Foreign Country)	**a. From which college/university and department did you receive this degree?** (College/University Name) (Department) (City/Town) (State/Foreign Country)
b. In what month and year was this degree awarded? Month ☐☐ Year 19☐☐	**b. In what month and year was this degree awarded?** Month ☐☐ Year 19☐☐	**b. In what month and year was this degree awarded?** Month ☐☐ Year 19☐☐
c. What type of degree did you receive? *Mark (X) ONLY one* 1 ☐ Bachelor's 2 ☐ Master's (includes MBA) 3 ☐ Doctorate (e.g., Ph.D., D.S.C, D.Sc., Ed.D.) 4 ☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) - *Specify* 91 ☐ Other - *Specify*	**c. What type of degree did you receive?** *Mark (X) ONLY one* 1 ☐ Bachelor's 2 ☐ Master's (includes MBA) 3 ☐ Doctorate (e.g., Ph.D., D.S.C, D.Sc., Ed.D.) 4 ☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) - *Specify* 91 ☐ Other - *Specify*	**c. What type of degree did you receive?** *Mark (X) ONLY one* 1 ☐ Bachelor's 2 ☐ Master's (includes MBA) 3 ☐ Doctorate (e.g., Ph.D., D.S.C, D.Sc., Ed.D.) 4 ☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) - *Specify* 91 ☐ Other - *Specify*
d. Using the EDUCATION CODES (LIST A: pp. 18-19), select the relevant degree field code(s) and title(s). MAJOR FIELD CODE ☐☐☐ SECOND MAJOR OR MINOR CODE ☐☐☐	**d. Using the EDUCATION CODES (LIST A: pp. 18-19), select the relevant degree field code(s) and title(s).** MAJOR FIELD CODE ☐☐☐ SECOND MAJOR OR MINOR CODE ☐☐☐	**d. Using the EDUCATION CODES (LIST A: pp. 18-19), select the relevant degree field code(s) and title(s).** MAJOR FIELD CODE ☐☐☐ SECOND MAJOR OR MINOR CODE ☐☐☐
e. From which of the following sources, if any, did you receive financial support for this degree? *Mark (X) all that apply* a ☐ Financial support from parents/spouse/ other relatives, not to be repaid b ☐ Loans from the school you attended, banks, federal or state government c ☐ Loans from parents or other relatives d ☐ Financial assistance from your employer e ☐ Tuition waivers, fellowships, grants, scholarships f ☐ Assistantships/Work Study g ☐ Earnings from employment h ☐ Other - *Specify*	**e. From which of the following sources, if any, did you receive financial support for this degree?** *Mark (X) all that apply* a ☐ Financial support from parents/spouse/ other relatives, not to be repaid b ☐ Loans from the school you attended, banks, federal or state government c ☐ Loans from parents or other relatives d ☐ Financial assistance from your employer e ☐ Tuition waivers, fellowships, grants, scholarships f ☐ Assistantships/Work Study g ☐ Earnings from employment h ☐ Other - *Specify*	**e. From which of the following sources, if any, did you receive financial support for this degree?** *Mark (X) all that apply* a ☐ Financial support from parents/spouse/ other relatives, not to be repaid b ☐ Loans from the school you attended, banks, federal or state government c ☐ Loans from parents or other relatives d ☐ Financial assistance from your employer e ☐ Tuition waivers, fellowships, grants, scholarships f ☐ Assistantships/Work Study g ☐ Earnings from employment h ☐ Other - *Specify*

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For questions A12a and A12c, include the total amount borrowed from ALL sources, (e.g., government, private lenders, parents, relatives, friends). Include loans that have been repaid or forgiven. If your loans were consolidated, please estimate how much was borrowed for your undergraduate degrees and how much was borrowed for your graduate degrees.

A12a. **Thinking about only the undergraduate degrees you completed before May 1997, what is the total amount you have borrowed from any source to finance your undergraduate degree(s)?**

$ _____.00 OR

☐ NONE ☐ ***SKIP to A12c***

A12b. ***(IF ANY)*** **As of the week of April 15, 1997 how much of this undergraduate amount did you still owe?**

$ _____.00 OR

☐ NONE

A12c. **Thinking about only the graduate degrees you completed before May 1997, what is the total amount you have borrowed from any source to finance your graduate degree(s)?**

0 ☐☐ MARK (X) THIS BOX IF NO GRADUATE DEGREES, AND THEN SKIP TO A13_1

$ _____.00 OR

☐ NONE ☐ ***SKIP to A13_1***

A12d. ***(IF ANY)*** **As of the week of April 15, 1997 how much of this graduate amount did you still owe?**

$ _____.00 OR

☐ NONE

Questions A13_1 through A21a ask about college or university courses you may have taken since completing your most recent degree.

A13_1. **Have you completed a degree since the week of April 15, 1997?**

1 ☐ Yes ☐ ***SKIP to A21a, page 4***

2 ☐ No

A13. **Between completing your most recent degree and the week of April 15, 1997, did you take any college or university courses or enroll in a college or university for any other reason, such as completing a master's, PhD, medical, or law degree?**

1 ☐ Yes ☐ ***SKIP to A18, page 4***

2 ☐ No

A14. **Which of the following were reasons why you were not enrolled or taking college courses during that time period?**

Mark (X) Yes or No for each	YES	NO
1. You had achieved your educational goals (at least temporarily)	1 ☐	2 ☐
2. You were waiting for the next school term to start	1 ☐	2 ☐
3. Financial reasons (e.g., too expensive, needed the money for other priorities)	1 ☐	2 ☐
4. Had a job, needed to work	1 ☐	2 ☐
5. Had to stop due to family responsibilities (e.g., caring for children or other family members, had a baby)	1 ☐	2 ☐
6. Moved, could no longer take courses at the school you were attending	1 ☐	2 ☐
7. No longer certain of which field of study you wanted to pursue	1 ☐	2 ☐
8. Needed a break, tired of going to school	1 ☐	2 ☐
9. Other - *Specify* _____	1 ☐	2 ☐

A14a. **Which two reasons marked in A14 represent your most important reasons for not taking college courses during that time period?** *Enter number of appropriate reason from A14 above.*

1. _____ MOST important reason

2. _____ SECOND MOST important reason *(Enter "0" if only one reason selected in A14.)*

A15. **Have you taken any college or university courses since the week of April 15, 1997?**

1 ☐ Yes ☐ ***SKIP to A25, page 5***

2 ☐ No

A16. ***(IF NO)*** **How likely is it that you will one day take additional college or university courses?**

Mark (X) ONLY one

1 ☐ Very likely

2 ☐ Somewhat likely ➤ ***SKIP to A25, page 5***

3 ☐ Very unlikely

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A18. What was your primary field of study between completing your most recent degree and the week of April 15, 1997?

☐ ☐ MARK (X) THIS BOX IF NO PRIMARY FIELD OF STUDY AND THEN SKIP TO A20

PRIMARY FIELD OF STUDY

A19. Using the EDUCATION CODES (LIST A: pp. 18-19) choose the code that best describes your primary field of study during that time.

CODE ☐☐☐

NOTE: Education codes range from 601 to 995

A18a. In which college or university department were you primarily taking classes or doing research (for example, English, chemistry)?

DEPARTMENT

A20. During that time, toward what degree or certificate, if any, were you (or are you) working?

IF WORKING ON MORE THAN ONE DEGREE: *Mark the highest level.*

Mark (X) ONLY one

0 ☐ No specific degree or certificate
1 ☐ Bachelor's degree
2 ☐ Post-baccalaureate certificate
3 ☐ Master's degree (including MBA)
4 ☐ Post master's certificate
5 ☐ Doctorate (Ph.D., D.S.C, D.Sc., Ed.D.)
6 ☐ Other professional degree (JD, LLB, ThD, MD, DDS, etc.) - *Specify*
91 ☐ Other - *Specify*

A21. From which of these sources did you receive financial support for coursework or enrollment between completing your most recent degree and April 15, 1997?

Mark (X) Yes or No for each	YES	NO
g. Financial support from parents/spouse/ other relatives, not to be repaid	1 ☐	2 ☐
a. Loans from the school you attended, banks, federal or state government	1 ☐	2 ☐
b. Loans from parents or other relatives	1 ☐	2 ☐
c. Financial assistance from your employer	1 ☐	2 ☐
d. Tuition waivers, fellowships, grants, or scholarships	1 ☐	2 ☐
e. Assistantships/Work Study	1 ☐	2 ☐
f. Earnings from employment	1 ☐	2 ☐
h. Other - *Specify*	1 ☐	2 ☐

A21a. For which of the following reasons were you taking classes or enrolled during that time?

Mark (X) Yes or No for each	YES	NO
a. To gain further education before beginning a career	1 ☐	2 ☐
b. To prepare for graduate school	1 ☐	2 ☐
c. To change your academic or occupational field	1 ☐	2 ☐
d. To gain further skills or knowledge in your academic or occupational field	1 ☐	2 ☐
e. For licensure or certification	1 ☐	2 ☐
f. To increase opportunities for promotion, advancement, or higher salary	1 ☐	2 ☐
g. Required or expected by employer	1 ☐	2 ☐
h. For leisure or personal interest	1 ☐	2 ☐
i. Other - *Specify*	1 ☐	2 ☐

A22. **More specifically, during the week of April 15, 1997, were you either taking college or university courses or enrolled for other reasons such as completing a master's, PhD, medical, or law degree?**

MARK "YES": *If you were enrolled in school but on vacation that week.*

1 ☐ Yes
2 ☐ No ☐ ***SKIP to A25***

A23. *(IF YES)* **What college or university were you attending during the week of April 15, 1997?** *Please do not abbreviate the school name.*

School Name:_____

City/Town:_____

State/Foreign Country:_____

A24. **Were you taking courses as . . .**

Mark (X) ONLY one

1 ☐ A part-time student
2 ☐ A full-time student

A25. **Thinking ahead to the future, what is the highest degree you ever expect to complete?** *If your current highest degree is the highest degree you expect to complete, please answer for that degree.*

Mark (X) ONLY one

1 ☐ Bachelor's
2 ☐ Master's (includes MBA)
3 ☐ Doctorate (e.g., Ph.D., D.S.C., D.Sc., Ed.D.)
4 ☐ Other professional degree (e.g., JD, LLB, ThD, MD, DDS, etc.) - *Specify*

91 ☐ Other- *Specify*

PART B - Employment Status

B1. **At any time during the three months following the completion of your most recent degree, did you have what you considered to be a "career-path" job?** *For "most recent degree," please do not include any degrees awarded after April 1997.*

A "career-path" job is a job that will help you in your future career plans or a job in the field in which you want to make your career.

1 ☐ Yes ☐ ***SKIP to B2***
2 ☐ No

B1a. **At any time during that same three-month period, did you accept what you considered to be a "career-path" job?**

1 ☐ Yes
2 ☐ No ☐ ***SKIP to B3***

B2. *(IF YES)* **When did you first start working for that employer?**

IN THE ANSWER CATEGORIES BELOW: *For "most recent degree," please do not include any degrees awarded after April 1997.*

Mark (X) ONLY one

1 ☐ Before working on your most recent degree
2 ☐ While working on your most recent degree
3 ☐ After completing your most recent degree

→ ***SKIP TO B4, page 6***

B3. *(IF NO)* **At any time during that same three-month period were you seeking a "career-path" job?**

1 ☐ Yes
2 ☐ No

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The next several questions are about your employment status during the reference week of April 13-19, 1997.

B4. **Were you working for pay (or profit) during the week of April 15, 1997? Please include self-employment and any jobs from which you were temporarily absent, for example, for illness, vacation, or parental leave (even if leave was unpaid).**

STUDENTS: *Count jobs required as part of a financial aid award, such as work study or assistantships. Do not count financial aid awards with no work requirement.*

1 ☐ Yes ☐ ***SKIP to B10***

2 ☐ No

B5. *(IF NO)* **Did you look for work during the four weeks preceding April 15, 1997 (that is, anytime between March 19 and April 15, 1997)?**

1 ☐ Yes

2 ☐ No

B6. **What were your reasons for not working during the week of April 15, 1997?**

Mark (X) Yes or No for each

		YES ☐	NO ☐
a.	Retired → 19 ☐☐ (Year Retired)	1 ☐	2 ☐
b.	On layoff from a job	1 ☐	2 ☐
c.	Student	1 ☐	2 ☐
d.	Family responsibilities	1 ☐	2 ☐
e.	Chronic illness or permanent disability .	1 ☐	2 ☐
f.	Suitable job not available	1 ☐	2 ☐
g.	Did not need or want to work	1 ☐	2 ☐
h.	Other - *Specify* ☐	1 ☐	2 ☐

B7. **Prior to the week of April 15, 1997, in what month and year did you last work for pay (or profit)?**

☐ ☐ **MARK (X) THIS BOX IF NEVER WORKED FOR PAY (OR PROFIT) AND THEN SKIP TO PART D, PAGE 13**

LAST WORKED ☐☐ (Month) 19 ☐☐ (Year)

B8. **What kind of work were you doing on this last job--that is, what was your occupation?** *Please be as specific as possible, including any area of specialization.*

EXAMPLE: *High school teacher - Math*

_____

_____

_____

_____

B9. **Using the JOB CODES (LIST B: pp. 20-21), choose the code that best describes the work you were doing on this last job.**

CODE ☐☐☐ ☐ ***SKIP to Part C, page 12***

NOTE: Job codes range from 010 to 500

B10. *(IF WORKING DURING WEEK OF APRIL 15)* **Counting all jobs you held during the week of April 15, 1997, was your typical work week 35 hours or more per week?**

1 ☐ Yes, worked 35 or more hours ☐ ***SKIP to shaded box, page 7***

2 ☐ No, worked less than 35 hours per week

B10a. *(IF LESS THAN 35 HOURS)* **During the week of April 15, 1997, did you want to work a full-time work week of 35 or more hours?**

1 ☐ Yes

2 ☐ No

B11. *(IF LESS THAN 35 HOURS)* **What were your reasons for working a part-time work week of less than 35 hours during the week of April 15, 1997?**

Mark (X) Yes or No for each

		YES ☐	NO ☐
a.	Retired or semi-retired → 19 ☐☐ (Year Retired)	1 ☐	2 ☐
b.	Student	1 ☐	2 ☐
c.	Family responsibilities	1 ☐	2 ☐
d.	Chronic illness or permanent disability .	1 ☐	2 ☐
e.	Suitable full-time work week job not available	1 ☐	2 ☐
f.	Did not need or want to work full time ..	1 ☐	2 ☐
g.	Other - *Specify* ☐	1 ☐	2 ☐

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Please answer the next series of questions for your principal job held during the week of April 15, 1997, that is, the job in which you worked the most hours during the week of April 15, 1997. A second job, if held, will be covered later.

B12. Which of the following categories best describes your employer during the week of April 15, 1997?

IF EMPLOYER WAS A SCHOOL: *Mark (X) the type of organizational charter (e.g., mark "state government" for state schools or "local government" for schools run by the local school district. Most private schools are "private not-for-profit".).*

Mark (X) ONLY one

1 ☐ A PRIVATE FOR-PROFIT company, business or individual, paying you wages, salary or commissions

2 ☐ A PRIVATE NOT-FOR-PROFIT, tax-exempt, or charitable organization

3 ☐ SELF-EMPLOYMENT in own NOT INCORPORATED business, professional practice, or farm

4 ☐ SELF-EMPLOYMENT in own INCORPORATED business, professional practice, or farm

5 ☐ Local GOVERNMENT (e.g., city, county)

6 ☐ State GOVERNMENT

7 ☐ U.S. military service, active duty, or Commissioned Corps (e.g., USPHS, NOAA)

8 ☐ U.S. GOVERNMENT as a civilian employee

91 ☐ Other - *Specify*

B13. Was your principal employer an educational institution?

1 ☐ Yes

2 ☐ No ☐ ***SKIP to B15a***

B13a. *(IF EDUCATIONAL INSTITUTION)* **Was this educational institution . . .**

Mark (X) ONLY one

1 ☐ A preschool, elementary, or middle school or system

2 ☐ A secondary school or system

3 ☐ A 2-year college, junior college, or technical institute

4 ☐ A 4-year college or university, other than a medical school

→ ***SKIP to B15b***

5 ☐ A medical school (including university-affiliated hospital or medical center)

6 ☐ A university-affiliated research institute

91 ☐ Something else - *Specify*

B15a. Thinking about your April 1997 employer's main business, (that is, what that employer makes or does), under which of the following categories does that employer's *main business* best fit?

IF PRINCIPAL EMPLOYER HAD MORE THAN ONE TYPE OF BUSINESS: *Please answer for the type of business primarily performed at the location where you worked.*

Mark (X) ONLY one

1 ☐ Agriculture, forestry, or fishing

2 ☐ Biotechnology

3 ☐ Construction or mining

4 ☐ Education

5 ☐ Finance, insurance or real estate services

6 ☐ Health services

7 ☐ Information technology or computer services

8 ☐ All other services (e.g., social, legal, business)

9 ☐ Manufacturing

10 ☐ Public administration/government

11 ☐ Research - *Specify*

12 ☐ Transportation services, utilities or communications

13 ☐ Wholesale or retail trade

91 ☐ Other - *Specify*

B15b. Counting all locations where this employer operated, how many people worked for your April 1997 employer? Your best estimate is fine.

Mark (X) ONLY one

1 ☐ Under 10 employees

2 ☐ 10-24 employees

3 ☐ 25-99 employees

4 ☐ 100-499 employees

5 ☐ 500-999 employees

6 ☐ 1,000-4,999 employees

7 ☐ 5,000+ employees

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B15c. Did your April 1997 employer come into being as a new business within the past 5 years?

1 ☐ Yes
2 ☐ No

B15d. Who was your principal employer during the week of April 15, 1997?

IF MORE THAN ONE JOB: *Record employer for whom you worked the most hours that week.*

IF EMPLOYER HAD MORE THAN ONE LOCATION: *Record location where you usually worked.*

Employer Name: _____

City or Town: _____

State/Foreign Country: _____

ZIP Code: _____

The next several questions ask about some alternative or temporary working relationships that people may have with their employers.

B15e. Did any of the following apply to your relationship with your principal employer during the week of April 15, 1997?

Mark (X) Yes or No for each	YES	NO
a. Self-employed working as an independent contractor, independent consultant, free lance worker or otherwise self-employed	1 ☐	2 ☐
b. Your principal employer contracted out your services to other organizations (not including temporary help or employment agencies)	1 ☐	2 ☐
c. Working through a temporary help or employment agency	1 ☐	2 ☐
d. Working on an "as needed", "seasonal" or short term basis	1 ☐	2 ☐
e. Job sharing	1 ☐	2 ☐
f. Working from home for 50 percent or more of your work time	1 ☐	2 ☐
g. Some other alternative or temporary working arrangement - *Specify* _____	1 ☐	2 ☐

B15e_1. Did you answer "yes" to any of the categories in B15e?

1 ☐ Yes
2 ☐ No ☐ ***SKIP to B15h*, page 9**

B15f. ***(IF YES)*** **What were your reasons for having an alternative or temporary work arrangement during the week of April 15, 1997?**

For this study, being self-employed is considered an alternative working relationship.

Mark (X) Yes or No for each	YES	NO
1. Schedule flexibility	1 ☐	2 ☐
2. Only type of work you could find	1 ☐	2 ☐
3. To gain experience that may lead to a permanent job	1 ☐	2 ☐
4. Better pay	1 ☐	2 ☐
5. Family-related reasons (e.g., children, spouse's job moved)	1 ☐	2 ☐
6. In school or some type of training program	1 ☐	2 ☐
7. Enjoy being your own boss	1 ☐	2 ☐
8. Employer changed your status to temporary	1 ☐	2 ☐
9. Other - *Specify* _____	1 ☐	2 ☐

B15g. Which <u>two</u> factors in B15f represent your most important reasons for having an alternative or temporary working arrangement or being self-employed? *Enter the number of the appropriate reason from B15f above.*

1. ☐ MOST important reason

2. ☐ SECOND MOST important reason (Enter "0" if only one reason selected in B15f.)

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B15h. If you could have any type of working arrangement you wanted, would your first choice be . . .

Mark (X) ONLY one

1 ☐ A permanent job (either full time or part time), that is a job with no set end date

2 ☐ Being self-employed

3 ☐ Some other type of working arrangement - *Specify*

B15i. Concerning your principal job during the week of April 15, 1997, were any of the following benefits available to you, even if you chose not to take them?

Mark (X) Yes or No for each	YES	NO
a. Health insurance that was at least partially paid by your employer	1 ☐	2 ☐
b. A pension plan or a retirement plan to which your employer contributed	1 ☐	2 ☐
c. A profit-sharing plan	1 ☐	2 ☐
d. Paid vacation, sick or personal days	1 ☐	2 ☐

B16. What kind of work were you doing on your principal job held during the week of April 15, 1997–that is, what was your occupation?
Please be as specific as possible, including any area of specialization.

EXAMPLE: *High school teacher - Math*

B17. Using the JOB CODES (LIST B: pp. 20-21), choose the code that best describes the work you were doing on your principal job during the week of April 15, 1997.

CODE ☐☐☐ NOTE: Job codes range from 010 to 500

B17_1. Did you record job code "141" (executive, manager, or administrator) in B17?

1 ☐ Yes
2 ☐ No ☐ ***SKIP to B19***

B18a. *(IF YES)* **Did your duties on this job require the technical expertise of a bachelor's degree or higher in . . .**

Mark (X) Yes or No for each	YES	NO
a. Engineering, computer science, math, or the natural sciences	1 ☐	2 ☐
b. The social sciences	1 ☐	2 ☐
c. Some other field (e.g., health or business) - *Specify*	1 ☐	2 ☐

B19. During what month and year did you start this job, (that is, your principal job held during the week of April 15, 1997)?

JOB STARTED Month ☐☐ Year 19☐☐

B20. As of the week of April 15, 1997, were you licensed or certified in your occupation? *Do not include academic degrees (e.g., BA, MA, PhD).*

1 ☐ Yes
2 ☐ No

B21. **Thinking about the relationship between your work and your education, to what extent was your work on your principal job held during the week of April 15, 1997, related to your highest degree field?** *For "highest degree," please do not include any degrees awarded after April 1997.*

Mark (X) ONLY one

1 ☐ Closely related
2 ☐ Somewhat related → ***SKIP to B24***
3 ☐ Not related

B22. *(IF NOT RELATED)* **Did any of these factors influence your decision to work in an area OUTSIDE THAT DEGREE FIELD?**

Mark (X) Yes or No for each	YES	NO
1. Pay or promotion opportunities	1 ☐	2 ☐
2. Working conditions (e.g., hours, equipment, working environment)	1 ☐	2 ☐
3. Job location	1 ☐	2 ☐
4. Change in career or professional interests	1 ☐	2 ☐
5. Family-related reasons (e.g., children, spouse's job moved)	1 ☐	2 ☐
6. Job in field not available	1 ☐	2 ☐
7. Other reason - *Specify*	1 ☐	2 ☐

B23. **Which two factors in B22 represent your most important reasons for working in an area outside that degree field?** *Enter number of appropriate factor from B22 above.*

1. ☐ MOST important reason
2. ☐ SECOND MOST important reason *(Enter "0" if only one factor selected in B22.)*

B24. **The next question is about your work activities on the principal job you held during the week of April 15, 1997. Which of the following work activities occupied 10 percent or more of your time during a typical work week on this job?**

Mark (X) Yes or No for each	YES	NO
1. Accounting, finance, contracts	1 ☐	2 ☐
2. Applied research - study directed toward gaining scientific knowledge to meet a recognized need	1 ☐	2 ☐
3. Basic research - study directed toward gaining scientific knowledge primarily for its own sake	1 ☐	2 ☐
4. Computer applications, programming, systems development	1 ☐	2 ☐
5. Development - using knowledge gained from research for the production of materials, devices	1 ☐	2 ☐
6. Design of equipment, processes, structures, models	1 ☐	2 ☐
7. Employee relations - including recruiting, personnel development, training	1 ☐	2 ☐
8. Managing and supervising	1 ☐	2 ☐
9. Production, operations, maintenance (e.g., truck driving, machine tooling, auto/machine repairing)	1 ☐	2 ☐
10. Professional services (e.g., health care, counseling, financial services, legal services)	1 ☐	2 ☐
11. Sales, purchasing, marketing, customer service, public relations	1 ☐	2 ☐
12. Quality or productivity management	1 ☐	2 ☐
13. Teaching	1 ☐	2 ☐
14. Other - *Specify*	1 ☐	2 ☐

B25. **On which two activities in B24 did you work the most hours during a typical week on this job?** *Enter number of appropriate activity from B24 above.*

1. ☐☐ Activity MOST hours
2. ☐☐ Activity SECOND MOST hours *(Enter "0" if only one activity selected in B24.)*

B26. **Did you supervise the work of others as part of your principal job held during the week of April 15, 1997?**

MARK "YES": *If you assigned duties to workers and recommended or initiated personnel actions such as hiring, firing, or promoting.*

TEACHERS: *Do not count students.*

1 ☐ Yes
2 ☐ No ☐ ***SKIP to B28***

B27. *(IF YES)* **How many people did you typically . . .**

IF NONE: *Enter "0."*

	Number Supervised
a. Supervise directly?	
b. Supervise through subordinate supervisors?. . .	

B28. **Before deductions, what was your basic annual salary on this job as of the week of April 15, 1997? (Do not include bonuses, overtime, or additional compensation for summertime teaching or research.)**

IF NOT SALARIED: *Please estimate your earned income, excluding business expenses.*

Include tips as part of salary.

$ _____ .00
Basic Annual Salary/Earned Income

B29. **During a typical week on this job, how many hours did you usually work?**

NUMBER OF HOURS PER WEEK

B29PAID. **And, for how many hours during a typical week were you paid?**

NUMBER OF HOURS PER WEEK

B29WEEKS. **Was your salary based on a full year, that is, 52 weeks, or something less than 52 weeks?**

1 ☐ 52 weeks ☐ ***SKIP to B30***
2 ☐ Something else

B29a. **Including paid vacation and paid sick leave, on how many weeks per year was your salary based?**

NUMBER OF WEEKS PER YEAR

B30. **During the week of April 15, 1997, was any of your work on this job supported by contracts or grants from the U.S. government?**

FEDERAL EMPLOYEES: *Please answer "No."*

Mark (X) ONLY one

1 ☐ Yes
2 ☐ No ☐ ***SKIP to B32a, page 12***

B31. *(IF YES)* **Which Federal agencies or departments were supporting your work during the week of April 15, 1997?**

Mark (X) all that apply

1 ☐ Agency for International Development (AID)
2 ☐ Agriculture Department
3 ☐ Commerce Department
4 ☐ Defense Department (DOD)
5 ☐ Department of Education (include NCES, OERI, FIPSE, FIRST)
6 ☐ Energy Department (DOE)
7 ☐ Environmental Protection Agency (EPA)
8 ☐ Health and Human Services Department (EXCLUDING NIH)
9 ☐ Interior Department
10 ☐ National Aeronautics and Space Administration (NASA)
11 ☐ National Institutes of Health (NIH)
12 ☐ National Science Foundation (NSF)
13 ☐ Transportation Department (DOT)
91 ☐ Other - *Specify*

B32a. **How would you rate your overall satisfaction with the job you held during the week of April 15, 1997?**

Mark (X) ONLY one

1 ☐ Very satisfied

2 ☐ Somewhat satisfied

3 ☐ Somewhat dissatisfied

4 ☐ Very dissatisfied

B35. **During the week of April 15, 1997, were you working for pay (or profit) at a second job (or business), including part-time, evening, or weekend work?**

1 ☐ Yes

2 ☐ No ☐ ***SKIP to Part C***

B36. *(IF YES)* **What kind of work were you doing on your second job during the week of April 15, 1997--that is, what was your occupation?** *Please be as specific as possible, including any area of specialization.*

IF MORE THAN TWO JOBS THAT WEEK: *Answer for the job at which you worked the second most hours.*

EXAMPLE: *High school teacher - Math*

_____

_____

_____

_____

B37. **Using the JOB CODES (LIST B: pp. 20-21), choose the code that <u>best</u> describes the work you were doing on your second job during the week of April 15, 1997.**

CODE ☐☐☐ NOTE: Job codes range from 010 to 500

B39. **To what extent was your work on this second job related to your <u>highest</u> degree field?** *For "highest degree," please do not include any degrees awarded after April 1997.*

Mark (X) ONLY one

1 ☐ Closely related

2 ☐ Somewhat related

3 ☐ Not related

PART C - Other Work-Related Information

C2. **During the past year, did you attend any professional society or association meetings or conferences?** *Please include regional, national, or international meetings.*

1 ☐ Yes

2 ☐ No

C3. **To how many national or international professional societies or associations do you currently belong?**

Number ☐☐ **OR** ☐ NONE

C4. **During the past year, did you attend any <u>work-related</u> workshops, seminars, or other work-related training activities?** *Do <u>not</u> include college courses.*

Do <u>not</u> include professional meetings unless you attended a special training session conducted at a meeting or conference.

1 ☐ Yes

2 ☐ No ☐ ***SKIP to Part D, page 13***

C5. *(IF YES)* **During the past year, in which of the following areas did you attend work-related workshops, seminars, or other work-related training activities?**

Mark (X) Yes or No for each	YES	NO
a. Management or supervisor training	1 ☐	2 ☐
b. Training in your occupational field	1 ☐	2 ☐
c. General professional training (e.g., public speaking, business writing)	1 ☐	2 ☐
d. Other work-related training - *Specify* ☐	1 ☐	2 ☐

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C6. For which of the following reasons did you attend training activities during the past year?

Mark (X) Yes or No for each	YES	NO
1. To facilitate a change in your occupational field	1 ☐	2 ☐
2. To gain <u>further</u> skills or knowledge in your occupational field	1 ☐	2 ☐
3. For licensure or certification	1 ☐	2 ☐
4. To increase opportunities for promotion, advancement or higher salary	1 ☐	2 ☐
5. To learn skills or knowledge needed for a recently acquired position	1 ☐	2 ☐
6. Required or expected by employer	1 ☐	2 ☐
7. Other - *Specify* ☐	1 ☐	2 ☐

C7. Which of the reasons marked in C6 represents your most important reason for attending training activities? *Enter number of appropriate reason from C6 above.*

☐ MOST important reason

PART D - Background Information

D1. What is your birthdate?

Month ☐☐ Day ☐☐ 19 Year ☐☐

D2. In what U.S. state, U.S. territory, or foreign country were you born?

State/Territory: _____ **OR**

Foreign Country: _____

D4DAD. What is the <u>highest</u> level of education <u>completed</u> by your <u>father or male guardian</u>?

Mark (X) ONLY one

1 ☐ Less than high school diploma
2 ☐ High school diploma or equivalent
3 ☐ Some college, vocational, or trade school (including 2-year degrees)
4 ☐ Graduated from a 4-year college (Bachelor's degree)
5 ☐ At least some graduate or professional school

D4MOM. What is the <u>highest</u> level of education <u>completed</u> by your <u>mother or female guardian</u>?

Mark (X) ONLY one

1 ☐ Less than high school diploma
2 ☐ High school diploma or equivalent
3 ☐ Some college, vocational, or trade school (including 2-year degrees)
4 ☐ Graduated from a 4-year college (Bachelor's degree)
5 ☐ At least some graduate or professional school

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D5. **Are you of Hispanic origin or descent?**

1 ☐ Yes
2 ☐ No ▢ ***SKIP to D7***

D6. **Which of the following categories <u>best</u> describes your Hispanic descent?**

IF MORE THAN ONE CATEGORY APPLIES: *Please select the <u>one</u> you consider the most important part of your background.*

Mark (X) ONLY one

1 ☐ Mexican, Mexican-American, Chicano
2 ☐ Puerto Rican
3 ☐ Cuban
91 ☐ Some other Hispanic descent - *Specify*

D7. **Are you . . .**

Mark (X) ONLY one

1 ☐ White
2 ☐ Black or African American
3 ☐ Asian or Pacific Islander
4 ☐ American Indian or Alaskan Native (e.g., Eskimo, Aleut)
91 ☐ Other - *Specify*

D8. **Are you . . .**

1 ☐ Male
2 ☐ Female

D9. **During the week of April 15, 1997, were you . . .**

Mark (X) ONLY one

1 ☐ A U.S. citizen
2 ☐ Not a U.S. citizen ▢ ***SKIP to D9_2***

D9_1. *(IF U.S. CITIZEN)* **Were you . . .**

Mark (X) ONLY one

1 ☐ A native-born citizen → ***SKIP to D12***
2 ☐ A naturalized citizen → ***SKIP to D12***

D9_2. *(IF NON-U.S. CITIZEN)* **During the week of April 15, 1997, did you have . . .**

Mark (X) ONLY one

3 ☐ A Permanent U.S. Resident Visa
4 ☐ A Temporary U.S. Resident Visa
5 ☐ No U.S. Visa - You were living outside the United States

D10. *(IF NON-U.S. CITIZEN)* **Of which country were you a citizen during the week of April 15, 1997?**

COUNTRY

D12. **During the week of <u>April 15, 1997</u>, were you living in the United States or one of its territories, or were you living in another country?**

1 ☐ United States or one of its territories
2 ☐ Another country

D13. **As of the week of April 15, 1997, were you . . .**

Mark (X) ONLY one

1 ☐ Married ▢ ***GO to D14, page 15***
2 ☐ Widowed → ***SKIP to D16, page 15***
3 ☐ Separated → ***SKIP to D16, page 15***
4 ☐ Divorced → ***SKIP to D16, page 15***
5 ☐ Never Married → ***SKIP to D16, page 15***

D14. *(IF MARRIED)* **During the week of April 15, 1997, was your spouse working for pay (or profit) at a full-time or part-time job?**

1 ☐ Yes, full-time
2 ☐ Yes, part-time
3 ☐ No ☐ ***SKIP to D16***

D15. *(IF YES)* **Did your spouse's duties on this job require the technical expertise of a bachelor's degree or higher in . . .**

Mark (X) Yes or No for each	YES	NO
a. Engineering, computer science, math or the natural sciences	1 ☐	2 ☐
b. The social sciences	1 ☐	2 ☐
c. Some other field (e.g., health or business) - *Specify* ☐	1 ☐	2 ☐

D16. **During the week of April 15, 1997, did you have any children living with you as part of your family?** *Only count children who lived with you at least 50 percent of the time.*

1 ☐ Yes
2 ☐ No ☐ ***SKIP to D18, page 16***

D17. *(IF YES)* **How many of these children living with you as part of your family were . . .**

IF NO CHILDREN IN A CATEGORY: *Enter "0."*

	Number of Children
e. Under age 2	
f. Aged 2-5	
b. Aged 6-11	
c. Aged 12-17	
d. Aged 18 or older	

PLEASE go to D18, page 16

The next question is designed to help us better understand the career paths of individuals with different physical abilities.

D18. **What is the <u>usual</u> degree of difficulty you have with . . .**

	MARK (X) ONE FOR EACH LINE				
	None	Slight	Moderate	Severe	Unable to Do
a. SEEING words or letters in ordinary newsprint (with glasses/contact lenses if you usually wear them)	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐
b. HEARING what is normally said in conversation with another person (with hearing aid, if you usually wear one)	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐
c. WALKING without human or mechanical assistance or using stairs	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐
d. LIFTING or carrying something as heavy as 10 pounds, such as a bag of groceries	0 ☐	1 ☐	2 ☐	3 ☐	4 ☐

D18_1. ☐ ☐ MARK (X) THIS BOX IF YOU ANSWERED "NONE" TO ALL ACTIVITIES IN D18 AND SKIP TO D22

D19. **What is the earliest age at which you <u>first</u> began experiencing <u>any</u> difficulties in <u>any</u> of these areas?**

AGE ☐☐ **OR** ☐ SINCE BIRTH

D22. **In case we need to clarify some of the information you have provided, please provide an address, telephone number(s), and any e-mail address (if applicable) where you can be reached.**

Number and Street/Apt. No.

City/Town | State | Zip Code | Plus 4

Country (If outside U.S.)

Telephone Numbers:

Daytime Area Code ☐☐☐ - Number ☐☐☐ - ☐☐☐☐

Evening Area Code ☐☐☐ - Number ☐☐☐ - ☐☐☐☐

E-mail Address(es):

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D22a. Does the name appearing on the back cover of this questionnaire match your current name?

☐ Yes ☐ ***SKIP to D21 below***

☐ No

D22b. Please provide your current name.

First Name	Middle Name	Last Name

D21. Since we are interested in how education and employment change over time, we may be recontacting you in the future. To help us contact you, please provide the name, address, and telephone number of someone who is likely to know where you can be reached. Do not include someone who lives in your household.
As with all the information provided in this questionnaire, complete confidentiality will be provided. This person will only be contacted if we have trouble contacting you in the future.

First Name	Middle Name	Last Name

Number and Street/Apt. No.

City/Town	State	Zip Code	Plus 4
		-	

Country (If outside U.S.)

Area Code ☐☐☐ - Number ☐☐☐ - ☐☐☐☐

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

LIST A: EDUCATION CODES

This list is ordered alphabetically. The titles in bold type are broad fields of study. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your field of study, use the "OTHER" code under the most appropriate broad field in bold print. If none of the codes fit your field of study, use Code 995.

Agriculture Business and Production
601 Agriculture, economics (also see 655 and 923)
602 OTHER agricultural business and production

Agricultural Sciences
605 Animal sciences
606 Food sciences and technology (also see 638)
607 Plant sciences (also see 633)
608 OTHER agricultural sciences

610 **Architecture/Environmental Design**
(for architectural engineering, see 723)

620 **Area/Ethnic Studies**

Biological/Life Sciences
631 Biochemistry and biophysics
632 Biology, general
633 Botany (also see 607)
634 Cell and molecular biology
635 Ecology
636 Genetics, animal and plant
637 Microbiology
638 Nutritional sciences (also see 606)
639 Pharmacology, human and animal (also see 788)
640 Physiology, human and animal
641 Zoology, general
642 OTHER biological sciences

Business Management/Administrative Services
651 Accounting
652 Actuarial science
653 Business administration and management
654 Business, general
655 Business/managerial economics (also see 601 and 923)
656 Business marketing/marketing mgmt.
657 Financial management
658 Marketing research
843 Operations research
659 OTHER business management/admin. services

Communications
661 Communications, general
662 Journalism
663 OTHER communications

Computer and Information Sciences
671 Computer/information sciences, general
672 Computer programming
673 Computer science (also see 727)
674 Computer systems analysis
675 Data processing technology
676 Information services and systems
677 OTHER computer and information sciences

Conservation/Renewable Natural Resources
680 Environmental science studies
681 Forestry sciences
682 OTHER conservation/renewable natural resources

690 **Criminal Justice/Protective Services**
(also see 922)

Education
701 Administration
702 Computer teacher education
703 Counselor education/guidance services
704 Educational psychology
705 Elementary teacher education
706 Mathematics teacher education
707 Physical education/coaching
708 Pre-elementary teacher education
709 Science teacher education
710 Secondary teacher education
711 Special education
712 Social science teacher education
713 OTHER education

Engineering
721 Aerospace, aeronautical, astronautical engineering
722 Agricultural engineering
723 Architectural engineering
724 Bioengineering and biomedical engineering
725 Chemical engineering
726 Civil engineering
727 Computer/systems engineering (also see 673)
728 Electrical, electronics, communications engineering (also see 751)
729 Engineering sciences, mechanics, physics
730 Environmental engineering
731 General engineering
732 Geophysical engineering
733 Industrial engineering (also see 752)
734 Materials engineering, including ceramics and textiles
735 Mechanical engineering (also see 753)
736 Metallurgical engineering
737 Mining and minerals engineering
738 Naval architecture and marine engineering
739 Nuclear engineering
740 Petroleum engineering
741 OTHER engineering

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LIST A: EDUCATION CODES - Continued

Engineering-Related Technologies
751 Electrical and electronic technologies
752 Industrial production technologies
753 Mechanical engineering-related technologies
754 OTHER engineering-related technologies

Languages, Linguistics, Literature/Letters
760 English Language and Literature/Letters
771 Linguistics
772 OTHER foreign languages and literature

Health Professions and Related Sciences
781 Audiology and speech pathology
782 Health services administration
783 Health/medical assistants
784 Health/medical technologies
785 Medical preparatory programs (e.g., pre-dentistry, pre-medical, pre-veterinary)
786 Medicine (e.g., dentistry, optometry, osteopathic, podiatry, veterinary)
787 Nursing (4 years or longer program)
788 Pharmacy (also see 639)
789 Physical therapy and other rehabilitation/ therapeutic services
790 Public health (including environmental health and epidemiology)
791 OTHER health/medical sciences

800 **Home Economics**

810 **Law/Prelaw/Legal Studies**

820 **Liberal Arts/General Studies**

830 **Library Science**

Mathematics
841 Applied (also see 843, 652)
842 Mathematics, general
843 Operations research
844 Statistics
845 OTHER mathematics

850 **Parks, Recreation, Leisure, and Fitness Studies**

Philosophy, Religion, and Theology
861 Philosophy of science
862 OTHER philosophy, religion, theology

Physical Sciences
871 Astronomy and astrophysics
872 Atmospheric sciences and meteorology
631 Biochemistry
873 Chemistry
874 Earth sciences
680 Environmental science studies
875 Geology
876 Geological sciences, other
877 Oceanography
878 Physics
879 OTHER physical sciences

Psychology
891 Clinical
892 Counseling
704 Educational
893 Experimental
894 General
895 Industrial/Organizational
896 Social
897 OTHER psychology

Public Affairs
901 Public administration
902 Public policy studies
903 OTHER public affairs

910 **Social Work**

Social Sciences and History
921 Anthropology and archeology
922 Criminology (also see 690)
923 Economics (also see 601 and 655)
924 Geography
925 History of science
926 History, other
927 International relations
928 Political science and government
929 Sociology
910 Social work
930 OTHER social sciences

Visual and Performing Arts
941 Dramatic arts
942 Fine arts, all fields
943 Music, all fields
944 OTHER visual and performing arts

935 OTHER FIELDS (Not Listed)

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LIST B: JOB CODES LIST

This list is ordered ALPHABETICALLY. The titles in bold type are broad job categories. To make sure you have found the BEST code, please review ALL broad categories before making your choice. If you cannot find the code that BEST describes your job, use the "OTHER" code under the most appropriate broad category in bold print. If none of the codes fit your job, use Code 500.

010 **Artists, Broadcasters, Editors, Entertainers, Public Relations Specialists, Writers**

Biological/Life Scientists
021 Agricultural and food scientists
022 Biochemists and biophysicists
023 Biological scientists (e.g., botanists, ecologists, zoologists)
024 Forestry and conservation scientists
025 Medical scientists (excluding practitioners)
026 Technologists & technicians in the biological/life sciences
027 OTHER biological/life scientists

Clerical/Administrative Support
031 Accounting clerks, bookkeepers
032 Secretaries, receptionists, typists
033 OTHER administrative (e.g., record clerks, telephone operators)

040 **Clergy & Other Religious Workers**

Computer Occupations (Also see 173)
*** Computer engineers (See 087, 088 under Engineering)
051 Computer programmers (business, scientific, process control)
052 Computer system analysts
053 Computer scientists, except system analysts
054 Information systems scientists or analysts
055 OTHER computer, information science occupations

*** **Consultants** *(Select the code that comes closest to your usual area of consulting)*

070 **Counselors, Educational & Vocational** (Also see 236)

Engineers, Architects, Surveyors
081 Architects
*** Engineers (Also see 100-103)
082 Aeronautical, aerospace, astronautical engineer
083 Agricultural engineer
084 Bioengineering & biomedical engineer
085 Chemical engineer
086 Civil, including architectural & sanitary engineer

*** Engineers (continued)
087 Computer engineer - hardware
088 Computer engineer - software
089 Electrical, electronic engineer
090 Environmental engineer
091 Industrial engineer
092 Marine engineer or naval architect engineer
093 Materials or metallurgical engineer
094 Mechanical engineer
095 Mining or geological engineer
096 Nuclear engineer
097 Petroleum engineer
098 Sales engineer
099 Other engineer
*** Engineering Technologists and Technicians
100 Electrical, electronic, industrial, mechanical
101 Drafting occupations, including computer drafting
102 Surveying and mapping
103 OTHER engineering technologists and technicians
104 Surveyors

110 **Farmers, Foresters & Fishermen**

Health Occupations
111 Diagnosing/Treating Practitioners (e.g., dentists, optometrists, physicians, psychiatrists, podiatrists, surgeons, veterinarians)
112 Registered nurses, pharmacists, dieticians, therapists, physician assistants
236 Psychologists, including clinical
113 Health Technologists & Technicians (e.g., dental hygienists, health record technologist/technicians, licensed practical nurses, medical or laboratory technicians, radiologic technologists/technicians)
114 OTHER health occupations

120 **Lawyers, Judges**

130 **Librarians, Archivists, Curators**

Managers, Executives, Administrators (Also see 151-153)
141 Top and mid-level managers, executives, administrators (people who manage other managers)
*** All other managers, including the self-employed - *Select the code that comes closest to the field you manage*

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LIST B: JOB CODES LIST - Continued

Management-Related Occupations (Also see 141)
151 Accountants, auditors, and other financial specialists
152 Personnel, training, and labor relations specialists
153 OTHER management related occupations

Mathematical Scientists
171 Actuaries
172 Mathematicians
173 Operations research analysts, modelling
174 Statisticians
175 Technologists and technicians in the mathematical sciences
176 OTHER mathematical scientists

Physical Scientists
191 Astronomers
192 Atmospheric and space scientists
193 Chemists, except biochemists
194 Geologists, including earth scientists
195 Oceanographers
196 Physicists
197 Technologists and technicians in the physical sciences
198 OTHER physical scientists

*** **Research Associates/Assistants**
(Select the code that comes closest to your field)

Sales and Marketing
200 Insurance, securities, real estate, & business services
201 Sales Occupations - Commodities Except Retail (e.g., industrial machinery/equipment/supplies, medical and dental equip/supplies)
202 Sales Occupations - Retail (e.g., furnishings, clothing, motor vehicles, cosmetics)
203 OTHER marketing and sales occupations

Service Occupations, Except Health (Also see 111-114)
221 Food Preparation and Service (e.g., cooks, waitresses, bartenders)
222 Protective services (e.g., fire fighters, police, guards)
223 OTHER service occupations, except health

Social Scientists
231 Anthropologists
232 Economists
233 Historians, science and technology
234 Historians, except science and technology
235 Political scientists
236 Psychologists, including clinical (Also see 070)
237 Sociologists
238 OTHER social scientist

240 **Social Workers**

Teachers/Professors
251 Pre-Kindergarten and kindergarten
252 Elementary
253 Secondary - computer, math, or sciences
254 Secondary - social sciences
255 Secondary - other subjects
256 Special education - primary and secondary
257 OTHER precollegiate area
*** Postsecondary
271 Agriculture
272 Art, Drama, and Music
273 Biological Sciences
274 Business Commerce and Marketing
275 Chemistry
276 Computer Science
277 Earth, Environmental, and Marine Science
278 Economics
279 Education
280 Engineering
281 English
282 Foreign Language
283 History
284 Home Economics
285 Law
286 Mathematical Sciences
287 Medical Science
288 Physical Education
289 Physics
290 Political Science
291 Psychology
292 Social Work
293 Sociology
294 Theology
295 Trade and Industrial
296 OTHER health specialties
297 OTHER natural sciences
298 OTHER social sciences
299 OTHER Postsecondary

Other Professions
401 Construction trades, miners & well drillers
402 Mechanics and repairers
403 Precision/production occupations (e.g., metal workers, woodworkers, butchers, bakers, printing occupations, tailors, shoemakers, photographic process)
404 Operators and related occupations (e.g., machine set-up, machine operators and tenders, fabricators, assemblers)
405 Transportation/material moving occupations

500 OTHER OCCUPATIONS (Not Listed)

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THANK YOU FOR COMPLETING THE QUESTIONNAIRE

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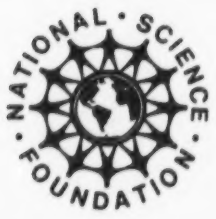

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